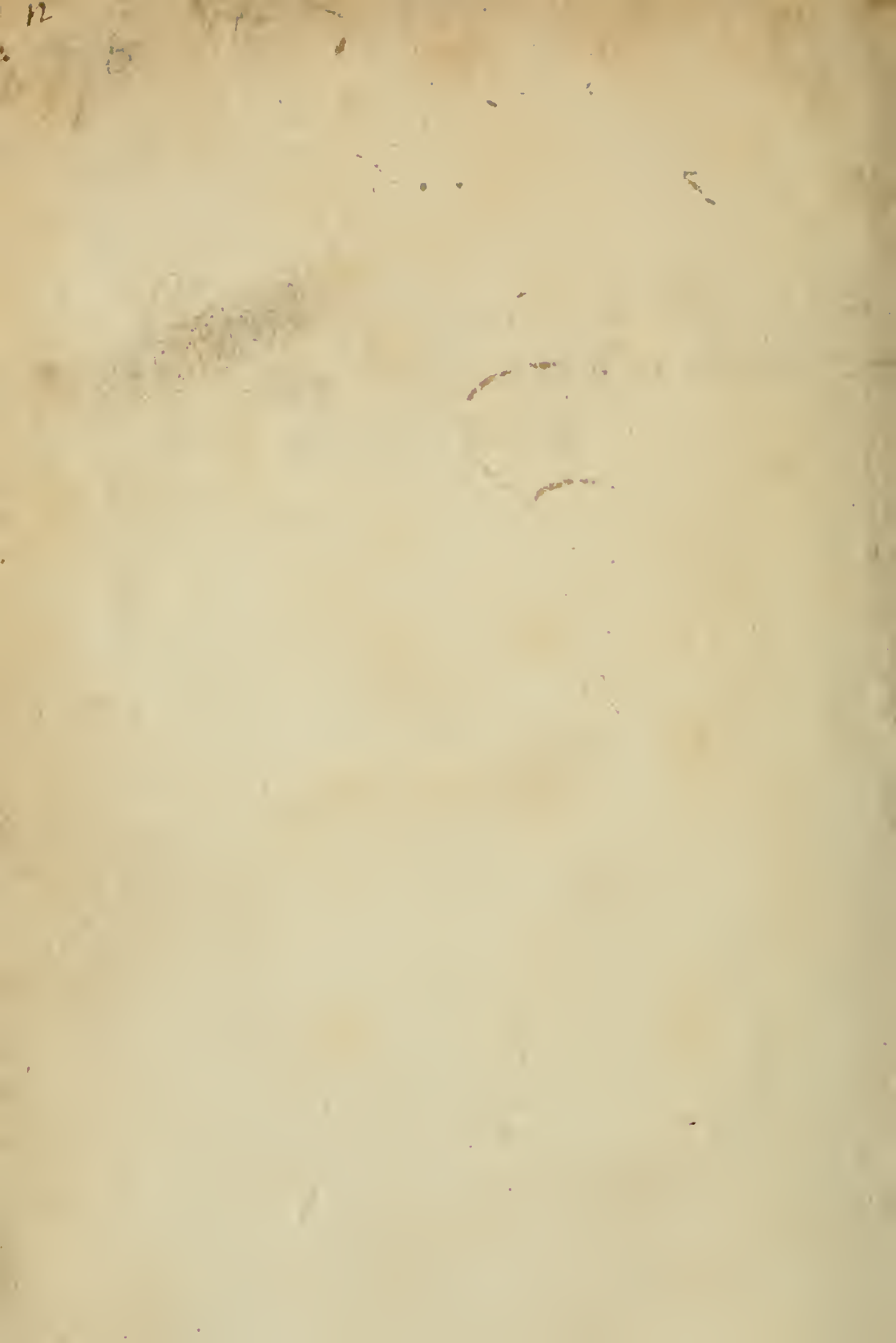
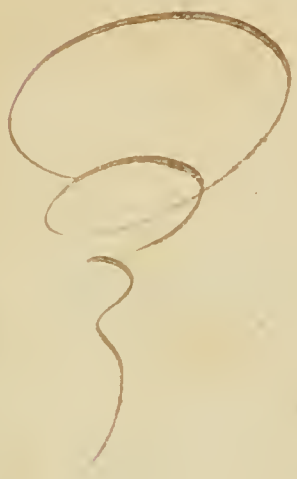


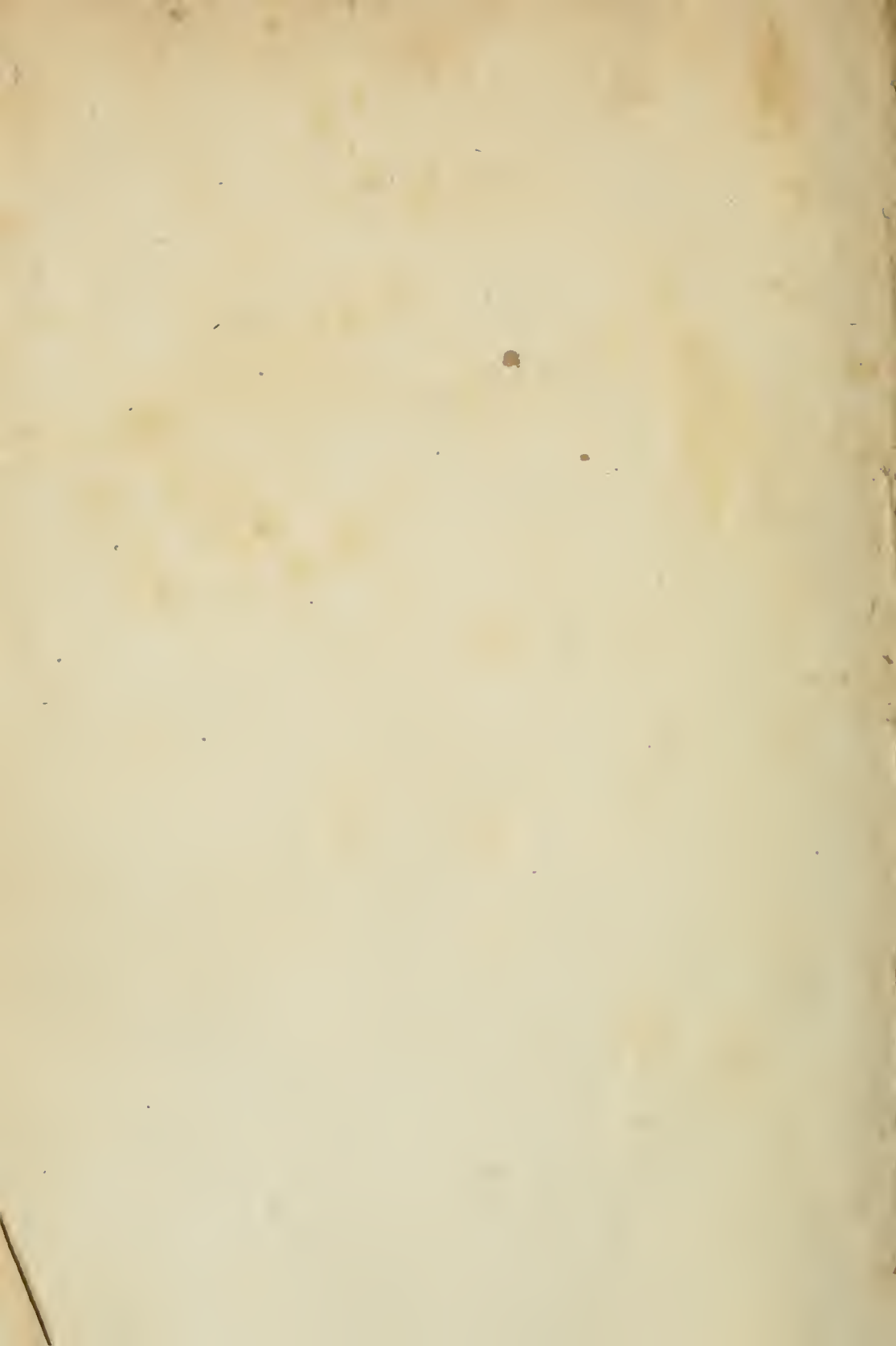
17
T. W. Allen



William Reynolds
his Book

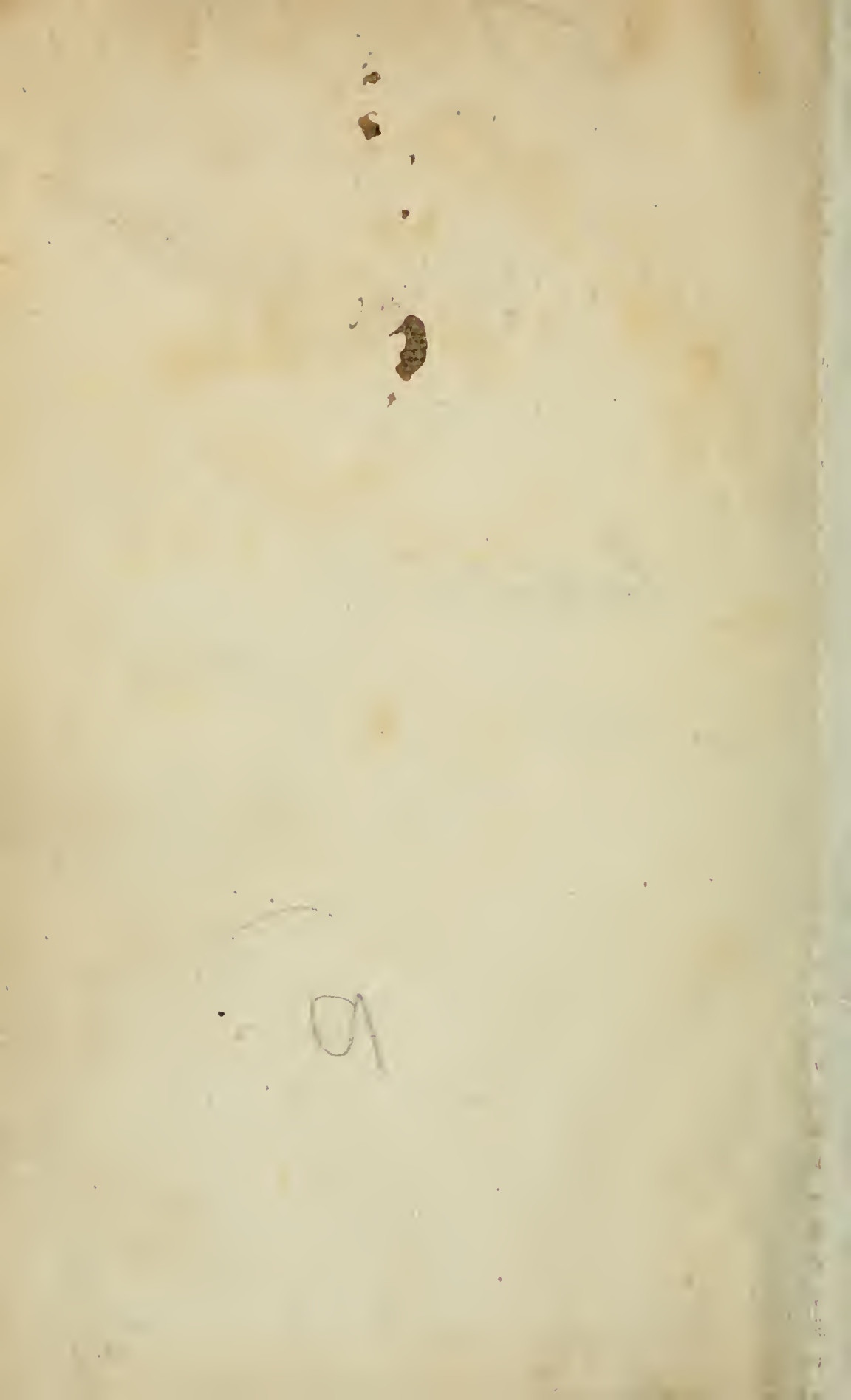
1742





711
Feynolds
his Book
5742

Presented to
W. W. Alexander
by J. E. Knowlton
Mar. 10th 1905.
Toronto Can.



10

A SHORT and DIRECT

M E T H O D

O F

P A I N T I N G

I N

Water-Colours.

Written by the late ingenious Mr. *SMITH*.



Handwritten notes in cursive script, including the name "Lynch" and the number "43", with horizontal lines and dashes.

L O N D O N :

Printed for, and Sold by MARY SMITH, at the *Fan* and *Flower-de-luce* over-against *Somerset-House* in the *Strand*, and no where else. MDCCLXXX.



A SHORT and DIRECT

METHOD

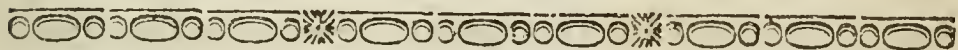
OF

PAINTING, &c.



PART I.

The Light *Italian* Way of *Painting*.



*How to draw a Landskip, Flowers, Cattle,
or any other Figure you design to paint.*



YOU must first take an oil'd Paper
and lay it upon a Print or Paint-
ing; be very careful that the Pa-
per is thoroughly cleans'd with the

B

Crum

Crum of Bread; then draw what you design with black, and afterwards turn the said Paper on the wrong Side, and touch all the Lines you have drawn with a Piece of *Red Chalk*: You need not red them very strong, but faintly. Then lay the chalk'd Side of the oil'd Paper upon the Leather or Paper, and with a Porcupine's Quill, draw the Lines over, not leaning too hard upon it, and you will have all the Lines appear very plain upon the Leather or Paper.

After you have thus prepared your Leather or Paper, by drawing your Design, take a little *Flake White*, mix'd with *Gum*, as the other Colours are, and dip your Pencil into the White of Eggs; let them be well beat first, according to what Quantity you use; and let the white seem transparent: But be careful that you don't put too much Egg into it, because it will make it of too slimy a Substance. Then with your Pencil lay all over the Figure or Landskip with the said *Flake-White*, observing, at the same Time, to lay it very thin. When it is dry, begin to colour the Figures first, and then

then the Landskip; because the Figures being colour'd first, will be fuller and clearer, and then you will see better to colour the Landskip: But you must be very careful in doing this, that you don't go over any of the Figures, but keep them and the Landskip clear, and in their proper Colours; because, if in colouring the Landskip you go over the Figures, you will not bring it to its proper Colour, but be in Danger of spoiling the Figures: Therefore be very careful in colouring, and give every thing its proper Colour, whether Cattle, Landskip, or any other Figure; without running one into or over another; but keep all clear, and in their proper Places.

What Gum is to be made use of.

The most proper for this Use, is *Gum-Arabick*; and is, indeed; preferable to all other Gums. The Manner of using it, is as follows: Put as much as you think fit into a Gallipot, cover it with Water, and when it is well dissolv'd, pour it off into another Pot, and with a Stick, beat it up

till it is fine and thick, like an Oil: If what you pour'd off at first is too thin, take more of the thick Gum which is left in the other Pot, and put to it, and beat it up till it is as thick as an Oil. Be careful in this, because, if the Gum is not well prepared, the Colour will fly and break off.

What Colours are to be made use of.

Umber, burnt and not burnt.

Red-Oaker, ground.

English-Oaker, ground.

Red-Lead, washed.

Blew-Smalt, mix'd in a Shell.

Carmine, mix'd.

Blew-Verditure, mix'd.

Flake-White, ground with Gum upon a Stone.

Dutch-

Dutch-Pink, ground and kept moist.

Rose-Pink, ground.

Lamp-Black, ground.

Blue-Litmose, which is sold at the Potter's.

Gumbooge, steep'd in Water.

Sap-Green, after the same Manner.

Alter-marine, for a fine Piece, otherwise *Blue-Smalt*, or *Prussian-Blue*, will do as well.

Indico, the best; not *Indico-Blue*; but *La Ouge Indico*.

As to these Colours, some are to be ground, some steep'd, some wash'd, and some burnt and ground; the Manner of doing which, is as follows:

Flake-

Flake-White is to be ground with Gum, thus: Lay the *Flake-White* upon a Stone, and put as much Gum to it as will make it so stiff as that you can hardly move the Muller round; then add Water to it, by little and little, till the Colour is of the Thickness of an Oil.

Umber is burnt thus: Put as much of it into the Fire as you think fit, and let it continue there till it is red-hot; then take it out and grind it very fine with Water first, and when it is pretty dry, add Gum to it, till it is of the same Substance with the *Flake-White*, and put but a little Water to it, because the burning of it takes away the Nature of Binding.

Umber that is not burnt, is easier to grind. Add but a little Gum to it, and grind it to the Thickness of the other Colours.

Red-Oaker must be ground in the same Manner as the unburnt *Umber*, only take care to pick out the Stones that are frequently found in it.

English-Oaker must be done after the very same Manner.

Red-Lead is to be washed as follows: But in buying it, you must be sure to choose that which is the palest, for that runs the finest: Put about a Quarter of a Pound in a Bason, or any other convenient Vessel, then fill it almost full with Water, and skim it well with a Spoon or Stick, and in about a Minute pour it off into a larger Vessel. You must take care not to pour it off too near the Bottom: Then pour in more Water, and skim it as before: Let it settle a little, and pour it off again. You may do this three or four Times. This done, pour the Water from the *Lead*, leaving only Moisture enough to pour the *Lead* into a *Chalk-Stone*, where it will immediately dry fit for Use.

Masticot must be washed in the same Manner as you wash *Red-Lead*.

Blue-Smalt. You must buy the best you can get, and mix it after this Manner: Put as much as you think fit in a Shell, and as much

much Gum, prepared as aforesaid, as will wet it well by mixing it with your Finger; then add Water to it, till it is of a proper Thickness; this you must do to most of the other Colours, except the thin ones, which I shall speak of in their proper Places.

Blue-Verditure must be mix'd in a Shell after the same Manner with the former.

Carmine, likewise, must be done in the very same Manner; only you must not use quite so much Gum.

Alter-marine is prepared after the same Manner. When you have washed the *Red-lead*, mix it in a Shell, just as you do the other Colours; which Method must be taken in preparing *Masticot*.

Indico must be well ground with Water first, and then prepar'd as the *Umber* which is not burnt.

Dutch-Pink must be ground first with Water, and then with Gum, but not so much of the latter as in other Colours.

Rose-

Rose-Pink must be prepared the same Way.

Lamp-Black must be ground with Gum first, adding afterwards a little Water.

Blue-Litmose must be soak'd after this Manner: Put as much of it into a Bason, &c. as you think fit, and cover it with Water; let it stand thus several Days; then pour it off; and you will have a very fine Colour. You may thicken it, by setting it in the Sun.

Sap-Green must be steep'd in a little leaden Pot, or a Shell; but not pour'd off; for which Reason you must put no more Water than what will just soak it, and then it is fit for Use.

Gumbooge may be done the same Way.

As to mixing the Colours for laying in the Faces, the Method is as follows: First, you must have the White of Eggs by you, well beaten, and pour'd off from the Froth; put a little into a Shell, and let it stand by you to dip your Pencil in; and when you have prepared the other Colours, for a very fair Face, take a little *Carmine*, and the like Quantity of *Red-Lead*, but let it most incline to the *Carmine*; then dip your Pencil into the Egg, and mix it with the aforesaid

Colours, doing the same very thin: This you must do with all the other Colours; but be careful of taking too much Colour at a Time; for the Egg will make it swell.

As to Mixtures, for a very fair Face, take *Carmin*e and *Red-Lead*, a little of each, let it incline most to the first; and put it in a Shell; dip your Pencil into the Egg, and mix it with the said Colours at the Side of the Shell; and then if you perform a young Man's Face, you must do as before, taking *Red-Lead* and *Yellow-Oaker*, a little of each, but most inclining to the first: For a brown Face, use *Red-Lead*, unburnt *Umber*, and a little *Rose-Pink*, mix'd so well together, as not to be easily distinguished: For yellowish Flesh, take *Red-Lead* and a little *Dutch-Pink*; for a purpleish Face, *Red-Lead*, *Rose-Pink*, and *Indico*; for any other colour'd Face that you may see in Pictures, add some of these Mixtures, according as your Genius directs; but be sure to make 'em as fleshy as you can.

For fair Hair, take unburnt *Umber* and a little *Yellow-Oaker*; for black, add *Lamp-Black*; for brown, take burnt *Umber* and *Yellow-Oaker*; for yellow, which is commonly used for a fair Face, take *Yellow-Oaker*
and

and a little *Umber*. You must be sure not to put *White* in any of the Colours; for after you have laid the prime Colour as aforesaid, all must be work'd up without any *White*.

As to Garments, for blue ones, take *Verditure*, *Smalt*, or *Alter-marine*, and finish as far as you can with the same Colours work'd deep. Observe the thin Part of the Colour, lay the Garments, and work strong with the thick Part of the Colour: For red, take *Carmin*e alone, or with *Red-Lead*, or with *Lake*; for purple, *Blue-Smalt* and *Lake*; for crimson, *Lake* alone; for green, *Blue-Verditure* and *Dutch-Pink*, shaded with *Indico* and *Dutch-Pink*; for yellow, *Dutch-Pink* shaded with *Umber*; for a Cloth Colour, *Rose-Pink*, *Indico*, and burnt *Umber* mix'd, shaded with the same. So likewise of any Colour that you have, first lay the thin, and shade with the deepest Colour; and as to any Colours, mix them as you please, except the thin transparent Colours, which will not bear it; and for Linings, use thin *Dutch-Pink* shaded with unburnt *Umber* and *Indico*.

For Cattle, you must imitate Nature, or your Pattern; it being so various, that there is hardly any Rules to be set; only lay the

first Colours thin, as in the Drapery, and shadow the first Shades with the thickest Part of the Colour.

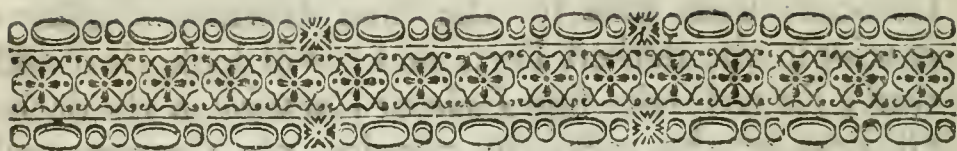
If you paint a white Horse, Dog, Ox, Fish, or Fowl, let the first Colour be *Dutch-Pink*, laid on so thin as hardly to be discern'd; let the next Shade be *Indico* and unburnt *Umber*. If you do any of these in brown, take *Umber*, burnt or unburnt, shaded with the same: If grey, with *Black* and *White*, or *Indico* and *White*: You may colour some with *Red-Lead* and *English-Oaker*, or any other Colour, taking care to shade with the same Colour.

In Landskips, for the Sky, first draw out faintly the Clouds in the Sky, and then colour the Sky with thin *Verditure* or *Smalt*, leaving the Clouds clear; then colour the Clouds with thin *Dutch-Pink*, and shade 'em with a reddish Purple, made of *Red-Lead*, *Rose-Pink*, and *Blue-Smalt*; if you will have it blueish, add more *Blue-Smalt*; then finish the Sky with the thick Part of the *Blue*, and so intermix the Colours by Degrees, that they may seem to be laid on all together, like a fine Print or Picture.

Trees must be colour'd with *Blue-Verditure* and unburnt *Umber*, if you design their Colour to be a blue misty green, adding for Difference, *Rose-Pink* or *Red-Oaker*, or *Yellow-Oaker*, *Red-Lead*, or *Carmine*; taking care that it inclines to a greenish Colour for those which are to appear near. For a blue green, take *Blue-Verditure* and *Dutch-Pink*; if yellow, add more *Dutch-Pink*; if reddish, add *Red-Lead* or *Carmine*; for a deep green, *Indico* and *Dutch-Pink*, shaded with the deepest Part of the Colours. For the Bodies of Trees, take *Umber* and *Blue*, or *Umber* and *Yellow*, or *Umber* and *Green*. Imitate Nature and good Patterns. In finishing Garments, let the Egg be quite laid

laid aside, because it will give a Deadness to the other Colours; then take for the blue Garments, *Altermarine* in the darkest Part, and it will look clear and well; for red, take fine *Lake* or *Carmin*e in the darkest Part of the reds; in purples, use *Carmin*e and *Litmosè*; in green, use *Verdisèy* and *Indico*; if blueish, add more *Indico*; if yellowish, more *Verdisèy*: For yellow, use *Lamp-Black* and *Gumbooge*, and a little *Litmosè* for a pale one; for a deep yellow, use *Carmin*e and *Verdisèy*, and a little *Litmosè*.

To finish the Faces: After you have shaded 'em as before, take care not to use any Egg; to shade the yellow or red Faces, use *Carmin*e and *Verdisèy*, giving the strongest Touches with it, and smooth it upon the lighter Part of the Shade, but take care not to go over the light Part with it, but keep in the first Shades. For fair Faces, use *Carmin*e, *Verdisèy*, and *Litmosè*, taking care not to go over the first Shades. Let these Shades be faint for fair Faces, only touch'd strong in the dark Places with *Carmin*e and *Verdisèy*; then take a little *Red-Lead* and *Carmin*e for the Blush of the Face; then take a little *Litmosè* and touch the blueish Shades very faintly; then look at the Faces, and give 'em dark strong Touches in the Eyes, and a strong Touch in the Mouth; then look and see if the Blush is bright and smooth, and it is done. For fair Hair of Women, shade with *Carmin*e, *Verdisèy*, and *Litmosè*; sometimes add *Gumbooge* for very fair yellowish Hair. Take Notice, first to lay the Colours as aforesaid, then shadow the Faces and Hair, then the Drapery, and then the Landskip.



PART II.

The Dark Way of PAINTING.



AS to the Colours, they are prepar'd in the same Manner as the other Colours are, only you must not use any Egg in them.

In the first Place, you must mark the Paper with *Black-Lead*, if they be white; and with *Tobacco-Pipe-Clay* if they are dark: Then scratch out the Pattern with your Pencil, or *Tobacco-Pipe-Clay*; this you may do at Pleasure, because you can't spoil it; only take care that you mark out the Figures as lofty with the Landskip as you can: Then take a little *Blue-Verditure* and *Flake-White* for the Sky. In this you need not be difficult, because you must go over it again. Then take a little *Lake*, or *Rose-Pink* and
Flake-

Flake-White: This you may dash out at Pleasure, and where you please, in the *Blue*: Then take a little *Red-Lead* and *Flake-White*, and a little *Yellow*, and strike at the Bottom of the Sky, but not on the *Blue*. All this you may do as quick and rough as you please. This done, take a little *Blue-Verditure* and *Flake-White*, but let it incline most to the former, and lay the distant Hills; then add to that a little *Rose-Pink*, and lay it for the Hills that are nearer. With this Colour you may lay distant Houses or Towers; then you may give a Strike with *Flake-White* and *Yellow*, on the Colour that is nearest your Pattern: So go down gradually, and add some blueish Green, made with *Flake-White*, *Blue-Verditure*, and *Dutch-Pink*; then lay it here and there, under the white *Yellow*: Add a little *Spanish-Brown* to the Green, and so whatever Degree of Green you please to make, do it by dipping your Pencil into any other Colour, mixing it with the aforesaid Green for Variety. Here and there you may mix a purpleish Colour; so work in all manner of Colours, according as your Fancy leads you. Observe to make the lowest Corners

ners the darkeſt Part of the Landſkip, and lay in the Houſes and Trees as you come down with the Grounds. All this you may do at Pleaſure; for the finiſhing will ſet all to Rights. If your Ground is gone over the Figures here and there in your colouring, it is no Matter. Then take ſome *Verdiſey Carmine*, and *Litmoſe*, and draw your Figures more perfectly. This you may do without Fear; becauſe when you come to lay the Colours of the Figures, that will make all right. After you have drawn the Figures, look and fill up every Place that is left, with Colour; this done, take a little *Blue-Smalt* and *Flake-White*, mix'd well to a fair Sky Colour, and with a large Pencil go over the Sky which you made before, leaving the light Part of the Sky clear at the Bottom; then take *Blue-Smalt* thin, and ſhadow the remote Hills here and there, where it is deepeſt, with the thick Part of the Colour; then for the purpleiſh Hills, take ſometimes *Blue-Smalt* alone, and ſometimes *Carmine* and *Litmoſe*, or *Gumbooge* and *Litmoſe*; make the Diſtances in as many different Colours as you can: Let your diſtant Blue-greens be
 ſhaded

shaded with *Litmose* and *Gumbooge*; you may put a little *Indico*: Distant Yellow-greens shade with *Gumbooge* and *Verdissey*; Reddish-greens with *Gumbooge*, *Verdissey*, and *Red-Oaker*. Let some of the distant Grounds incline to blue, some to greenish, some to yellowish, and some to reddish. When you have shaded the Distances, shade the nearer Things; such as Trees, Cattle, Rocks, Ruins, &c. for blue Trees, take *Indico* and *Verdissey*; if yellow, *Gumbooge* and *Verdissey*; in the darkest add a little *Indigo*: If reddish, *Red-Oaker* and *Verdissey*; and shade Ruins with *Gumbooge* and *Litmose*; if reddish, add *Carmine*; if blueish, add *Litmose*; observing that the darkest Shade for Cattle, Ruins, Grounds, or the Stumps of Trees, is generally *Carmine*, *Verdissey*, and *Litmose*; only in the darkest of all add a little *Indico*. This will do for Cattle, Birds, Buildings, dark Grounds, dark Garments, the darkest Shade of the Face, and Stalks of Trees. When you have shaded distant Things, strike the dark Shades under the Figures, which will direct you in the Grounds, and so shade the rest of the Grounds with a yellow, blueish,

and purpleish Shade, taking care not to mix any Earth Colours with them, unless it be Black with *Gumbooge*, or *Indigo* with *Carmin*e and *Verdis*e; and this must be done but seldom. If the *Litmo*s and *Verdis*e are both thick, you will seldom want these Earth Colours; so finish the Shades in the Landskips. For Seas, use *Litmo*s, *Gumbooge*, and *Indico*, mixing it to a purpleish Sea-green; for dark Waters, *Indico*, the darkest *Carmin*e, and *Verdis*e, inclining most to *Indico*; if light Waters, thin *Indico*. Herbs must be done as Trees are. Then lighten the Landskip thus: For Clouds, use *French-Oaker* and *Flake-White*; laying it thin first, and then work it thicker, with *Red-Lead* and *Flake-White*, or *Carmin*e and *Flake-White*, which you must do to all the lightening Colours.

After the Landskip is done so far, you may lay in the Figures, thus: Take a Pencil, with *Carmin*e, *Verdis*e, and *Litmo*s, and draw the Figures, without Fear; for if you are out, the colouring 'em will make all right. Then lay in the proper Colours, and cover the Strokes you have drawn; because these being not perfect, it is only to direct you to lay in the Colours bold and free.

In colouring the Garments, for blue ones, use *Blue* and *White*; for a Rose Colour, *Carmine* and *White*; for green, *Blue-Verditure*, *Dutch-Pink*, and *White*; for purple, *Blue-Verditure*, *Rose-Pink*, and *White*; for yellow, *Rose-Pink*, *Dutch-Pink*, and *White*; and so add *White* to any Earth Colour, just as you fancy. In colouring the Faces, for a fair one, use *Red-Lead*, *Carmine*, and *White*; for red, more *Red-Lead*, and some *Yellow*; for dark ones, add a little *Litmose*; for brown, add some *Umber* or *Yellow-Oaker* to the *Red-Lead* and *White*. As for the Hair, take *Umber* and *White*, or *Yellow-Oaker* and *White*, for fair Hair; for dark, burnt *Umber* or *Spanish-Brown* and *White*. Observe to lay the Garments first, then the Faces, then the Hair, and then the Girdles. Your Figures thus laid in, take some *Verdisey*, *Litmose*, and *Carmine*, and draw out the Figure as perfect as you can; because this is to guide you in all the Shadows. Then shadow them thus: For a Rose Colour, use thin *Carmine*; in the darkest Shade use *Rose-Pink* and *Carmine*, or *Lake*; for a deep blue, gloss over the blue with *Smalt*; and when it is dry, shade with *Litmose*; and in the dar-

D 2

kest

keft Part, with *Colen's Earth* and *Carmin*e; for yellow, *Gumbooge* and *Umber*; for a Straw Colour, *Gumbooge* and *Black*; for purple, *Carmin*e and *Litmoſe*; for a Cloath Colour, *Carmin*e, *Verdiſey*, and *Litmoſe*. For Linings, uſe *Litmoſe*, *Gumbooge*, and *Indico*. For Cattle, Buildings, or Ruins, take *Verdiſey*, *Litmoſe*, and *Carmin*e; if the Shadows are to be blue, take more *Litmoſe*; if yellow, *Gumbooge*; if red, *Carmin*e and *Verdiſey*. For umbering the Faces, uſe *Carmin*e and *Verdiſey*, adding *Litmoſe* for a fair one.

With this Shade you may ſhadow all Faces, taking care that if the Face is to be fair, add more *Litmoſe*; if red, add more *Carmin*e; if yellow, add more *Verdiſey*. When you have ſhaded the Faces with theſe Shades, then take for a fair Face, *French Yellow-Oaker* and *Flake-White*, and heighten the lighteſt Part of the Face; then add a little *Carmin*e, and lighten the darkeſt Side; afterwards ſmooth the Edges of the light Parts, that it may lie as if it was put on at once. When you have done this, take *Carmin*e, *Verdiſey*, and *Litmoſe*, and go over the dark Shades, to make them look clear,

2

giving

giving the darkeſt ſome Touches with the ſaid Colours: Then ſhade the Bluſhes of the fair Face with *Carmin*e and a little *Red-Lead*. This done, take a little *Litmoſe*, and ſhade the blueiſh Parts of the Face, taking care not to put it where the red ſhou'd be.

After you have umber'd the Faces, you muſt ſhadow the Hair of the Figures in the following Manner: For fair yellow Hair, take *Verdiſey*, *Carmin*e, and *Gumbooge*; if darker, more *Litmoſe*; if very dark, *Carmin*e, *Verdiſey*, *Litmoſe*, and *Indico*, or *Black*. When you have lighten'd the Faces in their proper Colours, then lighten the Hair; and for fair yellow Hair, take *French-Oaker* and *Flake-White*; for darker, add more *Oaker* and *Litmoſe*, and ſo more of the ſame for the darkeſt.

When you are finiſhing the Faces with the blue Shade, which is thin *Litmoſe*, ſtrike the darkeſt Sides of the Hair with it, which will make it look ſoft and well.

How to finish the Garments

As for the Garments, you must use for a Rose Colour, *Carmin*e and *Flake-White*; for blue Garments, use *Blue-Smalt* and *Flake-White*; here and there add a little *Yellow* or *Red-Oaker*; for a green Colour, use *Blue-Verditure*, *Dutch-Pink*, and *Flake-White*; for crimson, use *Carmin*e and a little *Flake-White*; for yellow, *Dutch-Pink* and *Flake-White*; for a Cloath Colour, use *Spanish-Brown* and *Flake-White*, or *Umber* and *Flake-White*, or *Black* and *Flake-White*, or *Umber*, *Litmose*, and *Flake-White*, or any Mixture of Colours, according as your Fancy directs you, adding *Flake-White* to it.

As to the further finishing of the Face, it is the same as mention'd in the Light Way, only use no Egg at all.

F I N I S.

THE
ART
OF
Drawing and Painting
IN
WATER-COLOURS.

WHEREBY

A Stranger to those ARTS may be immediately render'd capable of Delineating any View or Prospect with the utmost Exactness; of Colouring any Print or Drawing in the most Beautiful Manner; and of taking off MEDALS instantly, by various Ways, not yet known.

WITH

INSTRUCTIONS for making Transparent Colours of every Sort; partly from some Curious Personages in *Holland*, *France* and *Italy*; but chiefly from a Manuscript of the Great Mr. BOYLE; particularly a Receipt of that Gentleman's, for making a Blue Colour equal to Ultramarine.

L O N D O N:

Printed for J. PEELE, at *Locke's-Head* in *Amen-Corner*, *Pater-Noster Row*. MDCCLXXXI,

[Price One Shilling.]

T. R. A.



T O
EDWARD LISLE

O F

*Moyle's-Court in the County of
Hants, Esq; Verdurer of New-Forest.*

S I R,

WHEN I address my self
to a Gentleman of your
Learning and Merit,
'tis joyning with the
Multitude of your Ad-
mirers. Your extensive Knowledge,
however, would have given me a
sufficient Caution of laying before
so good a Judge the following Pa-
pers, if they had entirely been the
Effect of my own Study : But as

The DEDICATION.

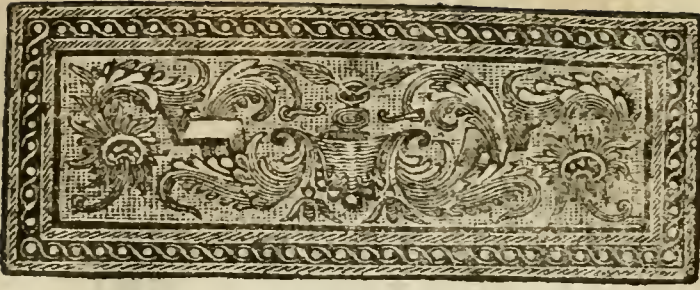
in some measure I owe them to the great Mr. *Boyle*, and other curious and ingenious Personages, I account my self happy in first making them publick under your Patronage.

THE Experiments, Sir, which I have made of every thing related in the following Treatise, prove them to be true and useful; and how far I have perform'd my part in disposing them in proper Order, I submit to your superior Skill: But as your Humanity and good Nature are sufficiently known to the World, I am persuaded you will excuse the Errors of,

S I R,

Your most Obedient,

Humble Servant.



P R E F A C E.



*THE following Papers are the Effect of some Years Study and Labour, collected in my Travels, and at length put together, at the Instance of a noble Friend; for his Instruction in the Art of Drawing and Painting in Water-Colours. Among other Particulars which they contain, are several Receipts for making and preparing of Colours, from a Manuscript of the late famous Mr. Boyle, which has never yet appear'd in Publick, and was commu-
nicated*

P R E F A C E.

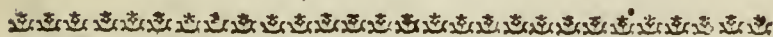
nicated to me by the late Lord Carleton. As I have experienc'd what is related in this Tract to be curious and extraordinary, I make no Apology for offering it to the View of the World: And on my own part, I shall think my Time well spent, if my Readers reap any Delight or Advantage from what I here publish from my own Observation; since I can assure them, that it was calculated for the Entertainment and Diversion of those who have a Genius for such pleasant Amusements, as well as for the Improvement of those who have already made some Progress in the delightful Arts abovementioned.



T H E



THE
ART
OF
Drawing *and* Painting
IN
WATER-COLOURS.



CHAP. I.

*Rules for Drawing any Object in its
Outlines, as exact as the Life or
Nature.*



TAKE a Sheet of the thinnest or whitest brown Paper, and brush it over with Oil of Turpentine, which will immediately render it transparent, and then put the Paper to dry in the Air; when 'tis dry, strain it upon a Frame, and fix it against

against any Object you design to draw; as an House, or Hill, or any other Object; then just before it, place a piece of Wood with an Hole in it fit for one Eye to look through; and as you meet any Out-lines of the Object you desire, upon the transparent Paper trace them over with a Pencil; so will you be sure you cannot err; for there will be nothing but just Proportion, and a true Representation of Nature.

To make this still of more Elegancy, observe the tracing of your Draughts where the Shades are, and mark them with your Pencil; for all the Art in the World can never dispose the Shades so regularly as one may touch by this Method: But the Shades must be done quickly after the Out-lines are drawn, and not at different times, because every Instant the Sun changes them.

IN this too, observe that in certain Objects you will have fainter, stronger, and yet more dark Shades; and in your Remarks of them take such Memorandums, as may direct you how to finish them, with *Indian Ink*, or other Colour, when you sit down to compleat your Work.

THE best way that I know, is to prepare three Shells or Gallipots of *Indian*

dian Ink mix'd with common Water, before you attempt to trace out your Object, *viz.* one of a very faint Black, the next a middling Black, and the other of an intense Black : Number them 1. 2. 3. from the lightest to the darkest ; and as you make your Observations of the Shades on your Object, mark upon your Draught the same Numbers as they happen to appear, so that afterwards you may finish with Certainty.

AGAIN, it is necessary in the Drawing of any thing after this manner, to observe that the Lines on the shady Side should be thick or bold, and those on the lighter Sides should be thinner or finer, in proportion to the Light that falls upon them. As for Example: In the darkest Part a Line may be of this Thickness; | in the next dark Part somewhat thin | ner ; | and in the other thus, | unless in | things | at great Distance, | hardly to be understood, or so faint as | hardly to be perceiv'd, thus ; | a meer Shadow as it were.

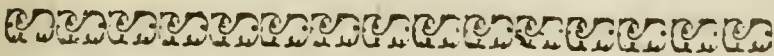
SOME have been guilty of a great Fault, though they have taken the Outlines very exact, to make all their Lines
B of

of an equal Thickness. | If an Object was, we'll suppose, two Miles off, the Drawing was as strong | in that Part of the Picture, as it was next the Eye, or not ten or twenty Feet from the Draughtsman. Now we must not express a Man with Buttons on his Coat at two Miles Distance, no more than we must have them omitted in a Person so near the Eye as ten or twenty Feet: Though this has inadvertently been done by some who have pass'd for great Men. And the Shades in those distant Appearances must be in proportion to the Strength of the Objects, as they appear to us, *i. e.* imperfect. Three or four well-directed Touches of the Pencil, on the shady Side, will represent a Figure at the Distance we can discern it, as lively as some hundreds will of the same Figure near the Eye.

BUT the Paper I speak of is of another Use; for if we lay it upon any Picture, or Print, in a loose Sheet, you will see all the Lines through it, and may then draw or copy it with the greatest Pleasure you will. Then if the Print or Picture is done by a good Master, see which Lines are strong, and which are tender and soft: Imitate them.

THERE is yet another way to do the same thing of taking Views and Landscapes,

scapes, which some prefer to the transparent Paper; which is either with white or black Tiffany, or Lawn, strain'd upon a Frame, as the Paper, and us'd in the same manner; excepting that the Black-Lead Pencil is used to the Paper, and on the white Tiffany we use Charcoal finely pointed, and very soft; and on the black Tiffany we use white Chalk of the tenderest Sort; and the Charcoal must also be used on the Lawn.



C H A P. II.

*How to bring these Drawings to Use;
and to copy from Prints, Paintings, &c.*

IF we make a Drawing upon transparent Paper, to take a Drawing from it regularly, get a piece of Paper of the same Size, and rub on one side of it some Powder of Black-Lead, till 'tis well and equally black'd, and so well rubb'd, that a Touch of a Finger will hardly be tinged with it.

THEN take the Drawing you have made, or Print, and lay the black'd Pa-
B 2
per

per under it, with the black Side downwards, upon a piece of white Paper, and pin the three together in two or three Places; take then a Pin or Needle a little blunt at the Point, and trace it over the Out-lines of your Picture; which with a little pressing, will direct the black'd Paper, to impress the undermost white Paper, so as to receive every Stroke you draw.

WHEN this is done, you must with your Black-Lead Pencil correct what Errors you find, and slightly clean the Draught new made with some stale Bread-crumbs.

As for the Draughts drawn on Tiffany or Lawn, lay them only on Paper; *i. e.* that which is drawn with Charcoal upon white Paper, and that drawn with Chalk on black or blue Paper; then giving each of them a knock or two with an Hammer, the Charcoal or the Chalk will fall through them directly in the Lines they were drawn, upon the Papers, and give you the true Representation of the Object you drew from the Life: Upon the black Paper you will see it in white Lines, and so the contrary.

THEN strengthen these Shadows of Drawings with your Black-Lead Pencils, or Chalk, or red Oker, on the Sheets of Paper,

Paper, where they have made the Marks ; otherwise, the Lines would easily be rubb'd out. But take care, as I have observ'd before, that this Amendment be made suddenly ; for these tender Draughts are soon vanish'd, if one does not take care to strengthen them immediately ; begin first at the bottom of the Drawing.

A N O T H E R way is to take a thin piece of Paper, and hold it against a Glass-Window, principally at such a Window as is Sash'd, for the Interruptions of the Lead in the smaller glazed Windows, will hinder part of this Prospect ; the Point is, draw what you see from the Glass, and then the Black-Lead Paper is to be used, as directed before.

T H E R E is another way still, which may be more easy to the Hand or Arm of a Person not accusom'd to drawing upon a Paper or Lawn placed upright, which is by the Use of a portable *Camera Obscura* ; though to help the first, one may hold a Baguette, or such a Stick in the Left-hand, as the Oil Painters use to rest the Right-hand upon ; or have some other Rest made for the Right-hand, as may be screwed up and down at one's Pleasure. But there is this Difference still between drawing a piece of Perspective or View on a transparent Paper

or Lawn placed upright against any Object, that such a Piece will take in more of the View or Object, and from a greater Distance than the portable *Camera Obscura* will. However, as the portable *Camera* will at first be most easy to the Arm for the Beginner, by Reason the Objects appear upon an Horizontal Plane, such as a Table; the Hand may have a proper Rest, and more readily follow the Lines represented on the Plane with that Exactness. But such a portable *Camera* as I mention, is of some Expence, and to such as can afford it, they may have them from any Price, from thirty Shillings to five Pounds apiece, according as they bespeak them, at Mr. *John Fowler's*, Mathematical Instrument-maker in *Switkin's-Alley*, near the *Royal-Exchange*.

WHAT will make the Difference in the Prices, will be the Largeness of the Sizes of the Glasses, which lye horizontally, and receive the Objects which we are to trace out with our Pencil: The smaller of these Glasses may be perhaps four Inches Square, and the larger fifteen Inches: On such Glasses you will meet the exact Representation, smaller or larger, according to the Bigness of the Machines, of the Objects we point or direct them

them to, each one adorn'd with the natural Colours agreeable to the Point of Distance; stronger nearer the Eye, and gradually declining, as the Objects were more remote from it: The Shades of the several Colours are in this way express'd in a very lively Manner. A few Lessons, with good Consideration, will be of good Information, not only to a Beginner, but to a Master of the Pencil.

BUT still to advance the Knowledge and Use of this portable *Camera*, I suppose, that instead of the Glasses which receive the Objects I speak of, there should be placed Frames of transparent Paper, to receive the Objects we have a mind to take, upon which one may use the Pencil still with greater Freedom. One may have a Dozen or two with each *Camera*; or one Frame will serve for as many Papers as we please to strain upon it, if one has Patience to paste them on.

THERE is yet another way of drawing Objects in the *Camera Obscura* way, which is by making a Room as dark as may be, only leaving an Hole in one of the Window-shutters, as low as possible, to receive an Ox-Eye Glass, as they call it, which is sold by the Mathematical Instrument-makers. This turns in a
 Socket,

Socket, so as to direct every Object within a certain Reach, to a Sheet of Paper placed at a proper Distance within the Room, to receive those Objects; upon which Paper you may draw them in great Perfection; but they all appear revers'd, or the wrong End upwards: However, they are in as exact Proportion and Beauty, as those represented in the former. In this Case, 'tis not however more difficult to draw, or rather copy the Objects, though they are revers'd, than to draw or copy the several Things which we see upright, on the Frames of transparent Paper, or Lawn, or Tiffany; for to trace Lines, will be as easily done one way as the other: And though the Objects falling on the Sheet of Paper, will, when we are drawing them, be revers'd, 'tis but turning the Sheet of Paper upside down when they are done, and our Drawing will be right to the Eye.

WHEN we shew this by way of Curiosity to those who are unacquainted with the Manner and Reasons why the Images represented on the Sheet of Paper appear upside down, it would not have so desirable an Effect, as if they could be view'd in their natural Situation: But to obviate this Difficulty, let the

the Sheet of Paper which is to receive the Objects, be placed against the back of a Chair, and let them look on the several Objects represented on the Paper over the back of the Chair, which will set them upright to the Eye. This way in bringing them to rights, is known but to very few, though at the first Proof every one will wonder he did not find it sooner.

THUS far is shew'd, how any one may copy either a Print, or Drawing, or Piece of Painting, or even make an exact Representation from the Life. But I must yet add, concerning the taking off of Prints or Drawings, a Method or two which are easy and diverting, not mention'd in the above Papers. One is, prick with a Pin any Out-Lines of a Print or Drawing one has a Mind to copy, and then laying the said Picture on a Sheet of Paper, take a Powder-puff, or a Tuft of Cotton, dipping it now and then in Charcoal-dust, or red Chalk Dust, and beat it over the prick'd Lines, through the Picture, renewing it with Dust frequently by dipping, and then you will have full Directions mark'd on your Cloath, or Paper, sufficient to finish a just Drawing. *N. B.* Such a prick'd piece of Work will give many hundred

C

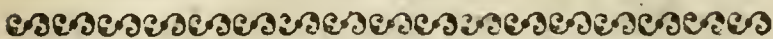
Proofs

Proofs of its Use. Though it spoils the Print, or Picture, it saves a vast deal of Trouble to the Painter on the drawing Part.

ANOTHER way there is to make an Impression from the Print, which shall give a just Copy of it; this is of great Use, when we want to carry every Stroke of the Engraver along with us. It will indeed fully the Print a little, though very little, if you are careful; and this Method will perhaps cost you two Minutes Time, when the drawing of it with every Stroke the Engraver has made, would keep you busy a Month.

FOR this take some soft Soap, either white, or of the green Sort; but, for my Part, I always used the green Soap; mix this with Water near an equal Quantity, till 'tis near the Consistence of a Jelly: Rub some of this Mixture on the Print, and wet the Paper you would have to receive the Impression from it gently, with a wet Sponge, then lay it on the Print, and cover all with two or three other pieces of dry Paper, and rub it very hard all over with any Thing that is smooth and polish'd, and the wetted Paper will have upon it the reverse of the Print you rubb'd it upon, with eve-
ry

ry distinct Line in the Original, if you have been careful to rub it equally.



C H A P. III.

Of taking off Medals instantly, by various ways not known.

IT may yet be useful to some People to learn another way of preserving to themselves good Specimens, and fine Designs of Medals; that is, such as may serve to draw from at any Time; and many Thousands of those Specimens may be taken in one Day, at a trifling Expence.

ONE Method is to take Icthyocolla, *i. e.* Isinglass, which is sold at the Druggists, and is call'd likewise Fish-Glue; it is made up in Rolls twisted in the Form of a Figure of Eight. This being broken to Pieces, take about an Ounce, and dissolve it in Water enough to cover it, over the Fire, stirring it gently till all is dissolv'd; then with a Camels-Hair Brush, stroke some of this Glue over the Medals you want to take off; after the Medals are laid as horizontally as possible, and when all the Surface is cover'd, let

C 2

them

them lie till the Glue is harden'd; and then with the point of a fine Needle, or Pin, raise the Edge of the Glue from each Medal, and the whole Impression in Glue will fly off as hard as Horn, with all the fine Sharpness of the Medal, as if it was struck. - This Glue may be made of any Colour we please, by mixing the Colour we want in the Water we melt the Glue in. Five Hundred of these Impressions in Glue will not weigh above half an Ounce, if each Medal is an Inch Diameter. These must dry immediately, not in an hot Sun, nor in a damp Place, but regularly.

IF we use the Isinglass without any Colour mix'd with the Water, we may, when we take our Copies from the Medals, breathe gently on the concave Side of them, which in some Measure will moisten our Medal, and then lay it upon a piece of the thickest sort of Leaf-Gold, which will stick to it, and by shining through the Isinglass, will appear like a Gold Medal; and if we would imitate a Copper Medal, we should mix Carmine with the Water we dissolve our Isinglass in.

WHEN I prescribe Water for this End, it is because it will do well, and may be had any where; but Brandy, or Spirits
of

of Wine, will give the Glue a much greater Strength, so as to be less subject to soften by damp Air. When I mention this, 'tis from an Experiment I made for preserving the natural Colour of Flowers several Years, which may be useful to the Curious, who use this Glue on any Occasion.

To preserve the Leaves of Tulips, make some Card-Paper into the Figure of Dripping-Pans, and with a strong Mixture of Gum-Arabick and Water, fix them to the Card; then pour on gently warm, some of the Isinglass prepared with Brandy, or Spirits, 'till the Leaf is quite cover'd, and in an Hour or two, the Liquor will become hard, and by keeping the Air from the Flower, will preserve it in all its Colours for several Years. The same may be done with the Blossoms of the Auricula, which will preserve all their Colours as if they were painted.

I SHALL now mention the Manner of taking off Medals of the largest Sort, which will still preserve to us the Delineations of many curious Pieces, and valuable Designs. For this use, with a Tuft of fine Cotton a little greas'd with Sallad Oyl, rub the Medals gently over; and melt some Stone Brimstone, enough
to

to cover the Medal half an Inch thick ; then put an Hoop of stiff Paper round the Edge of the Medal, and when the Brimstone is melted and not too Hot, pour it on the Medal, and as soon as it is fix'd and hardned you untie the Hoop, and the Impression on the Brimstone comes clean from the Medal ; which will produce a sharp and correct Mold to cast another from, in Plaister of *Paris*. But this should not be used on Silver Medals because it will change their Colour.

IF the Medals are Silver, use the same Ceremony of binding them round with Paper ; and oyling them, mix a little Plaister of *Paris* with Water, and fill the Hoop with it, then immediately fill the Case in a sprinkling Manner with Plaister of *Paris* till it hardens ; and when it is dry take it from the Medal.

BUT from the Molds cast in Brimstone which are concave, we again cast such Medals in Plaister of *Paris* as are convex, oyling the Mold as before, and using the Plaister of *Paris*, as above directed ; so may you take off any Medal, or fine *Bass-relief*, with a great deal of Exactness, even so as to form Medals from them in any sort of Metal. But there is no one that I know so curious in the Management of this Affair, as Mr. *Pingo*,

Pingo, in *New-Street-Square* near *Shoe-Lane*, *London*.

THERE is a Method of taking off Impressions in Plaister of *Paris* from Copper-Plates, by Oiling in a minute Degree the Plates, and then binding them about either with Card-Paper, or other PASTEBOARD, and pouring on some of the finest Plaister of *Paris* and Water one can get, and finishing the Work with Plaister, till it becomes dry, and hardens, you will then have a fine Impression, if one may so call it, of the Lines of the Plate, in the Plaister, which will serve to draw from when we have Occasion.

WE may add still the Manner of taking off any fine Engravings from the tops of Snuff-boxes, or Watch-cases, which is only holding them over the Smoak of a Candle, till they are quite black; then wipe off the black with the soft part of the Palm of the Hand, and lay on the Engraving a piece of white Paper a little wetted with a Sponge, and over that a thin piece of Flanel, or a piece of brown Paper held hard down over the engraved Part, and being hard rubb'd, the Paper next the Picture will receive a fine Impression, as if it had been pass'd through a Rolling-Press.

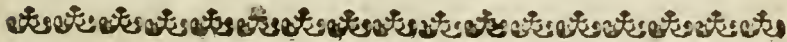
WE may yet recommend another Method of taking off Medals in great Perfection, which is by getting thin pieces of Lead, and placing the Medal horizontally on the top of a firm Post, or any steady Place; lay over the Lead a flat piece of harder Metal, and over that place a piece of a round turn'd Stick, such as is used in the Staff of a Broom, sawn off about five or six Inches in Length, and holding that tight with your left Hand on the Lead and flat piece of Metal, strike the top of the Stick a smart Blow with a large Hammer, and the Lead will be perfectly impress'd with the Image of the Medal: This Blow must be done at once, to render the Impression perfect; even this may be done on any Impression made on Sealing-wax.

ONE may likewise take off a Medal, by laying over it a piece of thin Sheet Block-tin, otherwise called *Foyle*, which is sold at the same Places where the Plaister of *Paris* is to be had, and rubbing it hard upon the Medal, it will give us a very good Likeness of whatever Medal we rub it upon. The Block-tin Sheet I mean, is such as is laid on the backs of Glasses, when they are to be

be silver'd, to render them Looking-Glafs.

OR we may yet take Impressions from Medals with Putty, such as the Glaziers use, although the Medals or *Bass-reliefs* are under-wrought.

So far I have given Instructions how we may either make Drawings from the Life, or copy whatever we think proper from Prints, Paintings, Medals, &c. though we knew nothing of Drawing before.



C H A P. IV.

Of Colours for illuminating of Prints in the best Manner; or of Painting in Water-Colours.

C OLOURS are to be distinguish'd in the following Manner; we must first take White, the next Yellow, the next Orange, and then proceed to the Red, after that to the Purple, then to the Blue, and after that to the Black. Observe, White and Black are the Extremes of Colour; then in the next Place, Yellow is the lesser Point of Colour towards the White, and the next to

D that

that is the Green, and after that the Blue. I speak of this, because every one who has a mind to know the manner of colouring of Prints, or painting in Miniature may profit by it.

I SHALL begin then with regard to colouring of Prints. If the Paper is pure white, use no Colour upon it, unless in the shaded Parts; and then in painting of Flowers, if they tend towards a reddish Colour, use a faint Colour of Carmine, with Gum Water upon the Shades only; if bluish, use a little faint Indigo in Gum Water, slightly pass'd over the Shades, easily touching upon the Lights; where there is a yellow Tinge, either use a faint Tincture of Gamboge, or of *French Berries*, which will be described among the yellows; or if the white has a purplish Cast, use a thin Lake on the shady Side, suffering the Colour only to shine a little into the Light, will give a Lustre to the Whites; and if a greenish Cast should be there, use either a faint Colour hardly to be discern'd of the Sap Green, or in Proportion of the Sap Green mix'd with the Verdegris Green. *N. B.* All these Colours mention'd to shade the Whites, may be found in the following Directions.

C H A P. V.

Of Whites for Painting in Miniature.

THE best white that is pretended to be sold in the Water-Colour manner, is the Flake-white, which is better than the White-lead ground: This, if it is pure, far exceeds the White-lead in Beauty; for the White-lead is apt to turn blackish, especially if you use it with hard Water.

BUT the best white that I know, is that made of Pearl, or the finer Parts of Oystershells, made into an impalpable Powder, (that is,) so soft as to feel like Grounds of Starch, or Powder for the Hair, when we touch it with the Fingers; this is call'd by some of the Colourmen Pearl-white, but 'tis hard to be found. If we have Occasion to use it, this white will mix well with any Colour; but if we use White-lead, let it be first rectified with Whitewine Vinegar, which will cause a Fermentation, and soon make the white settle; then pour off the Vinegar, and wash it with common Water; that is, put the Powder into a Glass of Water, stir it about, and presently

pour off the Water, while it is white, into some clean Receiver; and when the white Parts are settled, pour off the Water from thence, and they will be extremely fine. I mention this, that every one may make their Colours of the finest Sort. It may be perhaps a little Trouble; but who would not use such Pains to be superior to any Thing that has been before in the same Way.

WHEN the white we speak of is settled, add to it as much Gum-water as is necessary to bind it, or give it a Glaze; but take Notice I would not have any white used in colouring of Prints, but only with dry Colours, when we paint in Miniature.

IT is remarkable that White-lead will change black, if the Water we use with it comes from Iron or Clay: When I say black, I mean that in a Month or two you will find the Places where it lies the thickest, tinged with black, and when it is mix'd with any other Colour, it will soon change, or alter it.

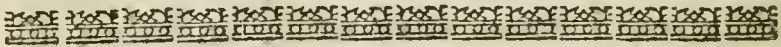
FOR this Reason I have try'd divers sorts of white; among others, the Powder of Egg-shells, of the brightest Colour, and well clean'd and wash'd, is very good to be grown'd with Gum-water, or else put about a twentieth part of clear
white

white Sugar candied to grind with it in Water; reduce this as fine as possible; that is, to the state of what we call an impalpable Powder, and use it. A Gentleman whom I have given this Receipt to, tells me, it is still more to the Purpose to pour on it some rectified Spirits of Wine, which he says will clear it from the Dross; but I have not try'd the Experiment: I suppose that when the Spirit of Wine has done its Work, it must be pour'd off, and then the Parts left behind must be mix'd with Gum-water again: But that Eggshell Powder is of great Service as a white in Water-Colours, I know very well; and that also it self, and Oystershell Powder, well rectified and mix'd with the white of an Egg, well beat, will make an extraordinary Mixture with other Colours, and correct them from changing or altering their Qualities.

WHILE I am speaking of white for illuminating of Prints, as I have already observ'd, that the clear white of the Paper is proper to be left uncolour'd; So if it happens that the Paper is given to *smk*, as it is call'd, or to spread any Water-Colour we lay upon it more than is necessary, then the way to correct it is as follows; *viz.* to fix the Paper in such a

Sta-

Station, as may only receive the Colour we lay on to glaze just as far as we design'd it, take some Starch boil'd and prepared in Water, of a middle Strength, and with a large Painting-brush, stroke it over the back of the Print, and when it is well dry'd in the Air or Sun, put the Print in a Book, with a Weight upon it, to rectify the Crumplings which it may receive by wetting of it; so will any Print be made to receive Water-Colours as one would have them be distributed, or that none of them should run farther than we intended.



C H A P. VI.

Of YELLOWS.

THERE are some Objects which have the Appearance of Gold shining through the Colour of Green, Red, or Blue; such as some sort of Flies and Beetles, and such as the Cantharides, which last Sort every one may buy at the Druggists. This Gold Transparency is very well imitated, by laying on the Drawing some Leaf Gold on the shaded Part, a little giving in to the light Side
of

of the Print; the way of laying on of Leaf Gold, is to wash the Part where the Gold is to be with strong Gum-water, and soon after that put the Gold on as smooth and even as possible, pressing it down close with Cotton: But take Care that when you lay on the Gum-water, you do not exceed the Limits you would have the Gold appear to shine: In this Case the Gold is only to shine through the transparent Colour which is to be laid upon it.

Now it must be understood, that the Leaf Gold will not regularly receive Water-Colours; so that to render it subservient to our Purpose, we must with a little thin Liquor of Ox-Gall in a Painting Brush of Camels-Hair stroke it over, and then it will receive any Colour we have a mind to paint upon it, and hold it. So may you have Gold Greens, Gold Reds, and Purples, Blues, or what you please. The Greens may be, first the Verdigris Green, which I shall describe hereafter; or the Sap Green, or Lake, or Carmine, if they are good; or for Purples, Lake and fine Indigo, or Carmine and Indigo; and for the Blues Indigo on the dark Side, and on the light Side, a little Stroke of Ultramarine Blue just to shine into the Light, and it will
have

have a wonderful Effect. *N. B.* One may find upon Rose-trees in *June* and *July*, a Beetle of a Green Gold Colour, which will serve to govern this kind of Painting; as for Gold of it self, I would not advise it to be used, unless we polish it, and then you may take the following Method.

WE see in many Manuscripts fine Gold Letters, which rise above the Surface of the Volume or Paper; these have raised the Admiration of the Curious, and the manner of making them is but little known; the Composition which raises them above the Paper, is made, as I am well inform'd, of Vermilion and the white of an Egg, whisk'd or beaten up to that Consistence as is call'd an Oil, work'd together like a kind of Paste, and with a Stamp fix'd to the Paper with Gum-Arabick, on this Figure of a Letter wash with a Camels-Hair Pencil, some strong Gum-water, taking care that the Gum does not reach more than the Outlines; then lay on the Leaf Gold close with some Cotton; and as soon as it is dry, rub it with some dry Cotton, and then polish it with a Dog's Tooth; this will make it appear as if it was really cast in Gold.

T H E R E

THERE is yet another way of working these Things in Gold; and that is, by using the Gold which is prepar'd in Shells, but it must be pure Gold, and not such as is brought from some Places in *Germany*, which will change Green in a few Days Time.

BEFORE we use this Gold, cover the shady Parts with Vermilion; and then after your Gold is well rectified with Spirits of Wine, lay it on with Gum-water, which will mix with it very well, and when it is dry polish it with a Dog's Tooth. I chuse when I lay on this Powder Gold, to leave the Lights vacant of it, and it makes a much brighter Appearance than if one was to cover the Object all over.

BUT if one was to cover by Accident the whole Piece with Gold, there is no better way to set it off, then by tracing over the shady Parts with Gall-Stones; or which is much preferable, the Yellow which I shall give the Composition of below, made of *French Berries*, I mean that which is the deepest in Colour; a little Minium brightens it very much; but see how I rectify the Minium amongst the Reds, and polish the Gold before you use any Minium to it.

SINCE I have mention'd Gold, I am next to speak of the Yellows, as they fall gradually in their course of Strength.

THE first is a kind of Straw Colour, which is made of Flower of Brimstone, which in its self is fine enough to mix with Gum-water; and the Gum-water, since I have not mention'd the preparing of it, I shall insert at the end of my Treatise of Colours.

A COMMON way of illuminating of Prints, is by giving the Tincture of Gamboge for a Yellow; and this may be of two or three Sorts, either fainter or stronger; the last to be a Shade to the first, and that to be shaded with the Preparation of *French Berries*, which I shall presently mention.

THE Great Mr. *Boyle* has left some Papers behind him that were never publish'd, which my Lord *Carleton* gave me, and I shall insert occasionally in this Treatise. With regard to Yellow Colours, he says that the Roots of *Barberies*, if they are cut and put in a Lixivium made strong with Water and Pearl Ashes, there will be a fine Yellow Colour produced from it; which I have tried, and succeeds very well.

ANOTHER way Mr. Boyle proposes, to make a transparent Yellow, which is to take the Root of the Mulberry, which affords a very yellowish Juice, washing it well from the Earth in common Water, boil it in the Lixivium I speak of, and of Pearl Ashes and Water, we may take out a strong Tincture, much deeper than the former; but the Roots of the Mulberries are much harder to be had than those of the Barberries; for Mulberry-trees are very scarce, and the Barberries are in almost every Hedge in *Essex*, about *Littlebury* especially.

WITH regard to the Barberry-Root, I think it would be worth while to plant them on purpose, for the Advantage that one might make from them by Dying; the Fruit, in my Opinion, being of little or no Signification, but the Root and the Wood, I think, will nearly answer the same End, in producing a fine Yellow.

YELLOW Oaker will make another good pale Yellow; but for illuminating of Prints, it is a Colour rather of too much Body; however, being well ground with Gum-water, is of Use after it has been well wash'd.

ANOTHER good Yellow may be made from the Plant call'd Lalandine,

infusing it in Water, and pressing it gently, and then boiling the Liquor with a little Allum; this Yellow will be a little inclining to Green.

BUT the Yellow which I like the best, and may be used in several Capacities of Lights and Strength, is that made of *French Berries*, prepared as follows.

TAKE of *French Berries* an Ounce whole, and boil them in half a Pint of the Lixivium made of Pearl Ashes and Water, till the Liquor will give a faint tinge of Yellow to a bit of Paper dipp'd in it; then pour it off from the Berries, and when 'tis cool, put it in a Bottle for Use.

THEN again, add half a Pint of the same Lixivium to the Berries, and half an Ounce of fresh Berries, and boil them till the Liquor is as deep as Gall-Stone; which will serve to shade all the Yellows you can use of any sort. You may boil this even to produce a brown Colour; and with a little Ox-Gall, it will serve to shade any Leaf-Gold that has been laid on Paper, as directed before, and is much preferable to Gall-Stone in imitating any gold Colour. It answers well upon a Tincture of Gamboge, or any of the former Yellows.

N E X T

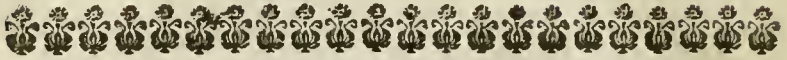
NEXT to this is the Tincture of Saffron, which with common Water only, affords a bright reddish Yellow, such as one would have to cover the shadow'd Parts of a Print for an Orange or hel'd Gold Colour; however there is nothing more high when we use Saffron, than when we infuse it in rectified Spirits of Wine; but then the Colour flies, unless we load it with Gum-Arabic, as I have try'd.

As for a deep Yellow with a Body, *Dutch Pink* comes the nearest to the aforesaid strong Yellow made of *French Berries*, in point of Colour; and of a lighter Yellow is the *English Pink*, which is still made of *French Berries*, and in a Body likewise.

I CANNOT help observing, that one may extract a good yellow Colour for illuminating of Prints, from the fresh Roots of Ginger, if one can get nothing else; I speak this because sometimes one wants a Yellow, and any one may find this any where, if Gamboge can't be had, and it makes a fine Green, with the transparent Verdigris I shall hereafter mention. *N. B.* This last Hint I took from Mr. *Boyle's Papers*.

IT is again to be remark'd, that the *English* and *Dutch Yellow Pinks*, are
made

made with *French* Berries ground to a fine Powder and boiled.

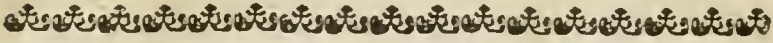


C H A P. VII.

Of Orange Colour.

THE Orange Colour is made for Copper Plates, to lay on first a Teint of Gamboge, and over that some of the Minium or Red-Lead, such as I shall describe, to be wash'd, and render'd fine and fit for use; for as it is bought at the Shops it is not by any means fine enough to paint with, and especially will change or turn Black after a few Weeks, if it is not refin'd; but if it is well prepared, will be everlasting and beautiful: But we must take this by the Way, that in the refining of it, two Ounces will not produce above 40 Grains of good Colour, to stand the Test of the Painters. I shall presently describe the Method of preparing it: This Colour may be mix'd with Gamboge, upon a white *Dutch* Tile to render it of the Teint we desire, either softer or stronger; or one may glaze the Gamboge, letting

it fall a little in the Lights with Tincture of Saffron, to make it glare into a strong Orange.



C H A P. VIII.

Of Minium, or the brightest Red-Lead, and how to prepare it.

THE Minium, or Red-Lead, is as heavy and strong a Colour as most we have, but is the most delightful one, when well prepared, that is, when 'tis well wash'd and clean'd of its more weighty Parts, which occasion it to turn Black. My way of doing it, as the great Mr. *Boyle* directs, is to put 3 or 4 Ounces of it in a Quart of Rain Water; then stir it and pour off the Water immediately, and let it settle to the Bottom of every Cup or Glass you pour it in; then pour off that Water, and in a Days time you will have the Colour dry and as fine as you can wish; put then a little piece of Gum-Arabic to each Glass or Cup, and as much Water as will moisten each one of them: Use any of these afterwards with Gum-water, as shall be hereafter

after directed; but if the Gum you should happen to put in, may be strong enough to glaze it, then use only common Water; in a word, as your Colour is less gum'd or over-gum'd, use less or more Gum-water; for of itself 'tis a dead Colour.

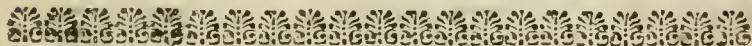
WHEN you use this Colour, touch it gently on the Yellow we have mention'd into the light Side, and if it wants a Shade, there may be a little Vermilion put upon it; but Vermilion is too heavy to paint with when we illuminate Prints, because it hides the Shades of the Engraver; however sometimes they had better be hidden than preserv'd; for my part, I generally shade this Red-Lead or Minium with Carmine, which gives it a fine Effect, and renders it equal to the brightest Red Flower I ever saw, leaving still the Lights uncoloured, only dashing a little way into the Lights with the Minium.

VERMILION I must advise to be left out of the Question, unless it is well wash'd, as I have directed the Minium to be, and then chiefly for dry painting: One may think then, that after I have advised the Vermilion to be abandon'd, it should be quite left out of my Table of Colours; but I speak at that Time

to such Persons as can use it moderately, and with Judgment; for all heavy Colours will drown the Shades or Strokes of the Engraver.

WHEN the Carmine has shaded the Minium, or Red-Lead, it may be shaded again with Lake in the strongest Part, to bring it to a Red as it ought to be.

IT may be a Wonder to some, that when I speak of Orange Colours, I should mention some of these deep Sorts, tending to Purples; but I mention them as Shades, and without which the Orange or Red could not appear with any Brightness.



C H A P. IX.

Of REDS.

S E C T. I.

Of S C A R L E T.

WHEN we have pass'd the Orange, we next come to the Scarlet, which may be represented on a Plane with Minium, a little mix'd with Vermilion; but if you have Occasion to

F paint

paint a Flower of a Scarlet Colour on a Print, let your Lights, as well as Shades, be covered thin with Minium, and the shaded Parts glazed with Carmine, which will produce an admirable Scarlet, such as we see in the Flower of the Scarlet Martagon.

S E C T. II.

Of CRIMSON.

FROM the Scarlet we next come to Crimson, which is represented with Carmine; but I must inform the Person who is to use it, that there are several sorts of it, some darker, and some much courser than others, and therefore should never be bought by Candle-light, unless of such as one can well trust; for between the very best and the worst Sort, there is about ten Shillings Difference in an Ounce, or indeed all the Money an Ounce will cost, for the bad will spoil all our Work. The best that I have met with was at Mr. *Goupee's*, the great Fan-Painter in *King-Street, Covent-Garden*; I have had some very good likewise, at the Colour-Shop, the Sign of the *Bell*, against *Arundel-Street* in the *Strand*.

S E C T. III.

Of LAKE.

AFTER this Crimfon, comes next the Lake, which shades and heightens the Carmine; but it is to be observ'd, that in the laying of Carmine upon a Print, let your Lights be touch'd only with a very thin Teint of it, hardly to be discern'd; then just on that part of the Light which enters upon the Shade, lay it on strong, and cover the Shade with it; and after that, on the stronger part of the Shade lay some Lake. The best Lake I have met with, is at the great Colour-Shop at the *White-Hart* in *Long-Acre*, near *James's-Street*, *Covent-Garden*, ready prepared in Shells for Water-Colours.

S E C T. IV.

Of Transparent CRIMSON.

BUT we may make a Liquid Colour, not much inferior to Carmine it self, with the Raspings of Brasil-wood, sold at the Dry-Salters; and particularly at the great Colour-Shop at *Holbourn-Bridge*;

F 2

which

which I mention, because I have been some time without knowing where to find it, for few Colour-Shops know what it is; and Lovers of Painting in this Way, are now and then impatient to have such Things, and unacquainted where to find them out.

To make this transparent Colour, we may take an Ounce of the Raspings of Brasil-wood, and boil it in twelve Ounces of Small-beer Wort, till the Colour of the Liquor is as strong as you please; which you may discover, by dipping into it a Slip of White-Paper, and when the Colour is as you would have it, add to it a little Tartar; and when 'tis cold, pass it through a Linnen Cloath, and put the clear Liquor into a Bottle for Use. This is one of the Receipts I had from a Manuscript of the great Mr. Boyle.

AND if we have a mind to bring this Colour to a Body, take Ox-blood, and dry it, 'till we can reduce it to Powder, which being mix'd with it, will give us a Colour, which I think will be little less in Value than a midling Sort of Carmine: And as a Gentleman of Learning and good Understanding in these Matters informs me, the Blood of an Ox or
Cow

Cow so dry'd, will make a good Body for any Colour.

S E C T. V.

Of INDIAN-RED.

NEXT to these Colours, Indian-Red, though it is a Colour of a Body, is helpful for a back Ground, for Flowers at a Distance, being used thereby with Gum-Water. But I shall have Occasion to give an Example of it by and by.

I HAVE lately seen an Earth brought from the *Isle of Wight*, of a much finer Colour than the *Indian-Red*; which I, and some others, have try'd, and find to mix extreamly well with Gum-Water; though as it is of a viscous Nature, it requires less Gum than most other Colours: And as it is naturally fit for Use without Grinding, and is viscous, so it will assuredly mix as well with Oyl as with Water. This was discover'd by *Edward Lisle*, Esq; to which Gentlemen we owe many more extraordinary Things of Value.

THERE is one Thing very extraordinary in this Earth, simple as 'tis, that if we rub a Deal Board with it, it renders it exactly of the Colour of Mohogany-
I wood,

wood, and stains it so deep, and with so much Strength, that 'tis very hard to get it out with Washing. And dry as this Earth was when I receiv'd it, I cannot get it out of some Papers, which by Accident were mix'd in my Pocket with it; so that I am perswaded it will prove of extraordinary Use, when its Virtues come to be known.

S E C T. VI.

Of Transparent PURPLE.

AFTER this we may make a transparent Purple, either more Red, or nearer the blue Colour, as we shall see Occasion, by using the same Menstruum as was prescribed in the former; *viz.* of small Beer-wort one Pint, in which boil one Ounce of rasped Brasil-wood, and half an Ounce of Log-wood or Campechy-wood, till the Liquor is heighten'd to the Colour you desire; which you must try, by dipping a piece of Paper into it. If you then find it too blue, in the other Sort you would make of a redder Kind, put but a quarter of an Ounce of Log-wood to the Brasil-wood, and you will find it much nearer the Red than the former; and so one may humour any
Degree

Degree of Purple, as you put more or less Logwood to the former Composition, and fix the Colour with a little Allum. This will produce such clear Purples, as no Mixture of solid Reds and Blues can produce, and the Receipt has been for a long Time kept a Secret.

MADAM *Mariana* of *Amsterdam*, who has been so famous for her Painting in Miniature, and her excellent Manner of illuminating Prints, told me, that the best Purple I could use, might be composed between the Carmine and Indigo; which to strengthen on the Red Side, one may add Lake between the lighter and darker Part; which I have in many Cases found to be good, and of great Significance: And so Lake, when it is used in the same way on the foregoing Purple, or the Liquid Crimson, produces a very fine Effect. One may vary the Colour of the Purple either redder, by putting more Carmine, or Bluer by using more Indigo; which being mix'd on a white *Dutch* Tile, will shew it self.

C H A P. X.

Of BLUE.

S E C T. I.

Of the ULTRAMARINE.

THE first and best bright Blue we have, is the Ultramarine Blue, which gives a Spirit to all Paintings where Blues are used; but it is very dear, if we have the best, even worth, or at least bought at six Pounds an Ounce; it is made from the *Lapis Lazuli*, divested of its Gold, and ground and made into an impalpable Powder. This Colour however, as it is of a very high Price, will make good its Value in Painting, as the least Touch of it is enough to illuminate a Flower. In using it, leave the White or light part of the Flower uncoloured, excepting that on the Edge of the Light next the shaded Parts, colour it with Ultramarine; and a little into the shaded Part of the Print, add a faint Tincture of Indigo, the Indigo covering a little the Verge on the shady Side of the Ultramarine, so will your Flower, &c. if it be

be a bright Blue, appear extremely beautiful.

N. B. THIS is a Colour of Body, and will last as long as one would desire, and even preserve any Colour you can mix with it.

To use it singly, there is nothing more dazzling; such as in the Case of Colouring Iron Gates, which many Years ago was executed at the Entrance of *Devonshire-House* in *Picadilly*. This Colour was laid upon the Iron-work, at the Expence of many Hundred Pounds, and remain'd in great Beauty till they were taken down, and the Entrance of that Palace alter'd; which shews that this Colour will not change, though it suffers all kinds of Weather; for 'tis computed that they had been expos'd upwards of Sixty Years. But the best Colour of this Sort is rarely to be met with, unless it be at *Mr. Goupees*, the great Fanshop in *King-Street*, near *Covent-Garden*, where is the best I ever saw.

S E C T. II.

Of the PRUSSIAN BLUE.

THE *Prussian* Blue is next to the *Ultramarine* for Beauty, if it is used
 G in

in Oyl; though I imagine it will not hold so well as the foregoing, considering it has not the Body of Ultramarine. This Colour, however, is attempted to be ground in Water; but there is such an oily Quality in it, that it does not mix kindly with Water, and at the best will change, as it is now prepared in the common way. It has been attempted to make a blue Ink; which indeed held the Colour for a Month or two, but then turn'd to a muddy Yellow; so when you put your Pencil with Gum-Water into a Shell of this Blue, you will find where the Water spreads, the Blue will change Yellowish, till the Body of the Blue is well stirred up. And when we have done our best with this Colour in Water, it will only serve to shade Ultramarine with; but in Oil it serves very well for the present to fill the Place of Ultramarine.

S E C T. III.

Of B L U E B I S E.

THE next Colour to the foregoing for Brightness, is that which we call Blue Bise; which though it is a Colour of Body, will flow pretty well in the Pencil; especially if it be well wash'd,

wash'd, as I have directed the Whites and the Minium to be done.

S E C T. IV.

Of SANDERS BLUE.

AFTER this Colour the *Sanders* Blue is of very good Use, and may serve as a Shade for Ultramarine, or the Blue Bise, where the Shades are not required to be extremely deep, and is of it self a pleasant Blue, to be laid between the Lights and Shades of such a Flower as is of a Mazarine Blue, as 'tis call'd.

S E C T. V.

Of LACMUS or LITMUS BLUE.

ANOTHER Blue, which is a beautiful Colour, and will run in a Pen as free as Ink is made of Lacmus, or as some call it Litmus, which may be met with at most Druggists. This Colour however is never met with prepared for Water-Colours; and therefore shall I set down the following Method of preparing it according to Mrs. *Mariana*, for it affords a bright Colour, which has extraordinary Effects.

TAKE of Lacmus one Ounce, and boil it in about a Pint of Small-beer Wort, till the Colour is as strong as you desire, then pour off the Liquor into a Gallipot, and let it cool for Use; it will soon become a Jelly, and by degrees grow hard. This Colour, however, is to be open'd again, and made liquid by Water, so as to be used as Ink; and as it is render'd thinner or thicker, so will be paler or darker. By what I find of this Lacmus, it is not only a beautiful but an holding Colour; for I have some Designs I colour'd with it in the Year 1714, which still preserve themselves in as much Beauty as they had at the first; and I have seen some in *Holland*, which were said to be done with it forty Years before, which a Year or two ago look'd still as fresh as one would desire the first Day one used it. This Colour, however, if it is touch'd with *Aqua fortis*, immediately changes to a fine Crimson, little inferior to Carmine, and then sinks quite through the Paper so as not to be got out.

So that when we use this Colour as Blue, it is best to preserve it from *Aqua fortis*, or such strong Acids. It is a good Shade for Ultramarine, or Blue Bise, where the strongest Shades should
not

not be extremely deep; and for colouring of Prints is very good, as it is a transparent Colour, and goes a great way.

S E C T. VI.

Of INDIGO.

INDIGO is the next Colour I shall speak of, as it certainly makes the strongest Shade for Blues of any other, and is a soft and warm Colour when it is well ground and wash'd with Gum-water, by Means of a Stone and Muller. As one happens to want the Use of this, put more Gum-water to it, if you would have it of the lightest Cast; or less, as you would have it darker; but before you touch your Print with it, try its Strength upon a white *Dutch* Tile, for it runs warmly in the Pencil, and may chance to be too strong for your Design; which you should always think of, when a flowing Colour is to be laid over a dark Shade of a Print; which Shade will very much aggravate its Blackness, and even make it appear quite Black.

S E C T. VII.

Of Mr. BOYLE'S BLUE.

IN the next Place, I have a Colour to describe, which I took from the great Mr. *Boyle's* Manuscripts given me by my Lord *Carleton*, and proves a beautiful Blue; and what I admire it for the more is, because the chief of the Ingredients it is composed of, may be easily had during four of the Summer Months; that is, the Cyanus or Blue Cornbottle-Flower, which abounds in almost every Corn-Field; Children may gather it, without hurting any Thing, about the Skirts or Verges of the Corn-Field. This Flower has two Blues in it, one of a pale Colour in the larger outward Leaves, and the other a deep Blue, which lies in the middle of the Flower, both these will do, if they are separated from the Buttons or Cases they grow in; but the deep Blue of the middle produces much the best Colour, as one may try, by rubbing it while it is fresh, so hard upon a Piece of good Writing Paper, as to press out the Juice, and it will yield an excellent Colour, which will not fade, as the

Experience of two or three Years has shew'd me. This part of the Flower is therefore the principal, and what is to be depended upon; therefore the same Day the People gather the Flowers, or the next at the latest, employ some Children to pick that Part clean from the rest; and when you have a good Quantity, press what Juice you can from it; and by adding to that a little Allum, you will have a lasting transparent Blue, of as bright a staining Colour as you would desire; and in my Opinion, it is not inferior in Beauty to Ultramarine: But for the other Parts of the Flower, which are paler, I must observe, that when I had a Bushel of them gather'd, and had not an Opportunity of pressing them immediately, they changed white; so that I cannot commend them, lest the Allum should not fix them; but as for the middle of the Flower, it is certainly as good a Blue as can be desired, and is durable.

If any one should object, that 'twill be troublesome to make it; let him consider only what Pains there is in gathering and curing of Saffron, which sometimes is sold at thirty Shillings the Pound, and seldom brings three Pounds *per* Pound: But a Blue, if it comes up to the Colour

lour of Ultramarine, is worth four or five Pounds *per* Ounce, especially when it stains so well as this does; therefore I should think it worth while, when any one has made this Experiment, as I have done, to have a piece of Ground on purpose for this Use, where no other Thing but this Cornbottle, or Cyanus should be sown: And as this Flower is plentiful enough in the Fields between *Twittenham* and *Tedington*, in *Middlesex*, so there may be Seed enough gather'd of it, in a quarter of an Hour, by one Hand, to sow an hundred Acres. There is likewise abundance of it in the large Cornfields in *Cambridgeshire*. But how valuable are many Things that we daily trample under Foot; If we knew their Virtues, we should use them, provided we could bring them to a proper Market. But let that be as it will; gather the Flowers about the beginning of *June*, or in *July* or *August*, and some you may find in *May*; these are for your immediate Work to make the Colour of, and must be dispatch'd as Saffron is done, or it will lose its Perfections. And as I happen to mention Saffron, which I very well know the Management of, by drying it on Kilns, I do not see why these Chives of Flowers may not be cured

cured in the same Manner, it would certainly produce a much greater Body of Colour, and a Tincture might be drawn from it with more ease than if we were to press it raw or fresh from the Field.

THE way then that I would have it dry'd like Saffron, is, to provide in the first place such a Kiln as is used for curing Saffron; within which you make a small Charcoal Fire, which communicates an Heat to the top of the Kiln which is cover'd with an Hair Cloth; and upon that lay on four or five Sheets of white Paper, I mean such as we use for curing of Saffron; then lay on the Paper a parcel of the pick'd Flowers till you have the thickness of two or three Inches, laying close and flat with a Knife, and sprinkle it with some thin Gum-water; then cover the Cake of Flowers with two or three more Sheets of Paper, and lay upon them a Board with a little Weight upon it for a few Minutes; then take off the Board, and taking hold of all the Papers, with both Hands turn your Cake of Flowers upon the Kiln, and when 'tis rightly placed, take off the upper Papers and sprinkle the Cake again with some thin Gum-water, and with a Knife settle your Cake of Flow-

H

ers,

ers, and lay on again your Papers and Board with a Weight upon it for a Minute or two, and then turn your Papers again and and again till the Flower Cake becomes united, and of the thickness of a Cake of Saffron; in this Work you will find the Flowers grow darker every time they are turn'd, till at length the Cake will look of a deep Blue tending to Black. From whence we easily draw such a Tincture as I speak off.

DURING this Operation, great care must be taken of the Fire, that it does not scorch the Flowers; let it be gentle and as constant as may be, which will be a sure way to bring your Flower Cake to a good Colour.

I WOULD advise in this case, that whoever attempts this, they should see the Management of Saffron, or read the Accounts that are publish'd of the curing it.

IF any one is desirous of seeing the curing of Saffron, with the manner of the Kilns; the best Artists that way are about *Chesterford* and *Littlebury* in *Essex*; though I think it can be of no great moment, since there is publish'd a large Account of its Preparation, in *Mr. Bradley's* Monthly Treatise of Husbandry and Gardening;

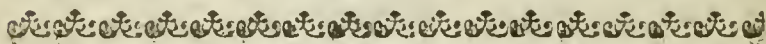
Gardening; and in the present Case of the Blue, I have made the necessary Alterations, and I think given what is sufficient for such as are acquainted already with the curing of Flowers by Kiln-drying.

BUT I come now to speak of the Culture of this valuable Flower; for I must now so call it, since I am well assured of its Perfections.

EVERY knob or head of Seed must be open'd before we sow it, for each head contains a great number of Seeds; the Preparation of the Ground for the Reception of this Seed, need not be more troublesome or expensive than common Ploughing requires; which being done, sow the Seed either at the end of *August*, which will come up soon enough to stand the Winter, and blossom early the *May* following; or else sow it at the end of *March*, and it will begin flowering the following *June*. When the Ground is fresh plow'd at either of these Seasons, sow the Seed, and harrow it in with Bushes, and it will presently come up.

IN the choice of the Seed I should observe, that it be gathered only in such Fields where we are sure there grow no Corn-Bottles of any other Colour but Blue; and then one may expect all the

Plants which rise from such Seed to produce blue Flowers; but if they should be gathered in such Places, where there are varieties of them, we must expect various Sorts, as White, Red, or Purple, although we are sure we gather the Seed from such as were truly of the Blue Sort; for according to the Doctrine of the Generation of Plants, which has been explain'd to the World in a great many Instances, if there is a red Flower of the same Tribe with this growing near it, the difference of Colour will be so intermix'd between both, that the Seed of both will bring a variety from the principal, depending of the Colours of both. And thus I conclude what I have to say of Blues; as for the Smalt, 'tis much too heavy a Colour to be used for illuminating of Prints.



C H A P. XI.

Of Black.

THE proper Black for Water-colours, is what they call Ivory-black, which if it be pure and well ground, is of
 use

use in miniature Painting; but very seldom; and indeed ought not to be used in colouring of Prints, if they are good, for 'tis too heavy a Colour, and hides the beautiful Strokes of the Engraver, unless done with very great care: If it is necessary however to use Black by way of darkening a Print, rather chuse a strong Tincture of good *Indian Ink*, than the Ivory Black; but to colour Pieces in Miniature use the Ivory Black prepared as follows.

LET your burnt Ivory be well ground in Gum-water, and then beat the White of an Egg very well till you find a kind of oily Liquor settles to the Bottom; this Liquor mix with as much of the Ivory Black as you think necessary to make it run freely in the Pencil, and it will afford an extraordinary Gloss; and if the Object is shining, such as the Wings of some Beetles, mix with some of it a little White upon a *Dutch* glazed Tyle, till you find it light enough to relieve the Shade; and then make another lighter mixture of the same, which being used on the brighter Part of the Subject will produce the Effect you desire.

C H A P. XII.

Of Greens.

The Progress of Greens from Yellow to Blue.

I HAVE already given an account of the Progress of Colour from White, through the Yellows to the Orange, the Reds, Purples and Blues to the Blacks; and shall now treat of the Greens in their several Orders, from the Yellows to the Blues.

GREENS are allow'd by all to depend upon the Yellow and the Blue, and by the help of one and the other Colour, may be framed any Green Colour we please.

THE Gamboge is one of our first Yellows, which with the Preparation of Verdegris I shall insert, may be made to produce five or six Sorts of Green according as the Gamboge abounds, or is in less Quantity; if it abounds one may make a tolerable Oak Green with it, and being still more mix'd with the Verdegris Green, it will be a Grass Green.

BUT the Yellow I prefer before all others, is that which is made of *French Berries* described above, which I have observed

observed is of different Capacities as the Liquor it is boyl'd in is more or less stain'd with it; when it is very thin, it makes a good Glaze all over the Verdegriſ, and as it comes nearer to *Dutch* Pink or Gall-ſtone, commands almoſt any Colour we want, being agreeably mix'd with the transparent Verdegriſ, and ſtill is transparent.

So the Yellow drawn from the Roots of Barberries, and thoſe drawn from the Roots of the Mulberry Tree, will produce in great meaſure the like Effect, being mix'd with the transparent Verdegriſ.

As for the Verdegriſ itſelf, it produces a fine bluifh Green, flows eaſy in the Pencil, and may even ſerve as an Ink to write with.

THE preparing of this Colour is yet very little known, and I ſhall therefore inform my Reader how to do it.

TAKE of common Verdegriſ three Ounces, break it a little, and boil it gently in a Pint of White-wine Vinegar, ſtirring it continually; when we perceive it to boil, add a little Tartar broken, and keep your mixture ſtirring till you find the clear Liquor of ſuch a Colour as you would wiſh; that is, of a fine transparent Green, with a blue Caſt,

2

which

which you may do by dipping in of a Stick and touching of a piece of Paper with it.

WHEN you have a Colour to your Mind, pour it thro' a linnen Cloth into an open Vessel, and set it to cool; when it is quite cold, keep it in a close Vessel for use, pouring out a little at a time as you want it; for when it is exposed to the Air it will soon dry, but is reducible again by common Water.

WHEN we prepare this liquid Colour, do not use the distill'd Verdegris, for it will not answer the end we propose.

THIS Liquid should be touch'd upon part of the Lights and Shades of a Print, and the Shades afterwards colour'd with Sap-Green.

N. B. IN the making this Green, take care you make it strong enough, for it is not to be strengthned afterwards without the trouble of boiling afresh, but may at any time be render'd as faint as we please, by mixing common Water with it.

SAP-GREEN is somewhat of the Colour of a deep Green of an Oak-leaf, if it is used thin with common Water; for this as well as the former wants no Gum, but it will, if we use it strong, produce as dark a Green as any we can imagine;

imagine: We may try our Colour first on a White *Dutch Tile*, and by thinning it with Water, render it of what Strength we please, and brighten it very much, with adding to it a little of the Liquid *Verdigris*.

Sap-Green is made two Ways, viz.

First, TAKE the Flowers of the Blue *Flag-Iris*, or *Flower-de-Luce*, and press them while there is any Juice to be got from them; boil this gently in a glazed Pipkin, till it grows thick, adding a little Allum to it, and it will make a very useful and lasting Green. *N. B.* In the boyling of any Juice, &c. of the Colours heretofore mention'd, use an earthen glazed Pipkin; for if you boil them in Vessels of Metal, they will sometimes change from the Design we intend.

Secondly, ANOTHER way there is of producing a Sap-Green for washing or illuminating of Prints, which is to take the Juice of Buckthorn-berries; and though that Juice simply will yield only a dark Purple, of a very base Hue, yet by adding Tartar to it, it will turn to a good Sap-Green, and may be brought to a good Consistence by Boyling.

I

EITHER

EITHER of these Colours, mix well with the Liquid *Verdigris* above-mention'd, as well as make a delicate Shade for it.

THERE is yet one Green more, which is admired by some, and carries a good Body with it, with a Degree of Transparency, as I make it, though as it is commonly used, it is a full-bodied Colour, fit only for Miniature-Painting: For this End they mix *Dutch* Pink with Indigo, to what Degree of Colour they please: but in the place of *Dutch* Pink, my high Preparation of *French* Berries with Indigo I think much to be prefer'd, as this answers all the Intent of *Dutch* Pink, and carries a Transparency with it, which the *Dutch* Pink has not. And thus have I given such an Account of the Passage of Greens from the Yellow to the darkeſt Blue, as I think neceſſary, for the Inſtruction of thoſe who delight in illuminating of Prints, and Painting in Water-Colours.

C H A P. XIII.

Of a portable Case for Colours.

BEFORE, however, I conclude this Treatise of Colours, let me advise such Persons who are curious in making Observations of the Colours of Flowers, to have always in their Pocket a small Case with Colours in it, about the Bigness of a Snuff-box, made of Ivory, about half an Inch thick, in which should be scoop'd several Concaves about half an Inch Diameter each, and as deep as the Ivory would bear, without going through: These Cavities, may be placed as near one another as possible, and fill'd with Colours of several Sorts; and as for the Liquid Colours, they will dry, by being expos'd to the Air, so that one may have them altogether in a few Days dry enough to be carried in the Pocket; I shall suppose the piece of Ivory dispos'd in the following Manner, *viz.*

IN the foregoing Figure one may observe the Disposition of the several Cavities for the Colours in the Numbers 1, 2, 3, 4, 5, &c. and on one Side a little Case for Pencils, and another for *Indian-Ink*, Gum-Arabick Powder'd with White Sugar-Candy, or for any Thing else an Artist may have Occasion for in the Painting way.

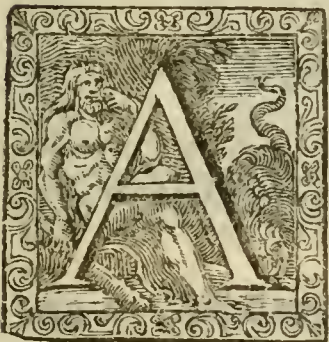
IN such a Case you may have thirty-two Sorts of Colour under very easy Command, besides other Necessaries: Then as a Cover to this, let there be a Piece of plain Ivory to open with an Hinge, that may serve as a Pallet, and all this will lie in a very narrow Compass; nay, even though one was to add another piece of Ivory of half an Inch thick, to open below that of the Colours, to include a small pair of Compasses, a Port-Crayon, and some other such useful Materials for Drawing.

THERE remains now only to mention the way how to prepare Gum-Water in the best Manner: That is, take of the whitest Gum-Arabick one Ounce, of clear white Sugar Candied half an Ounce; dissolve these in a Quart of clear Water, and add to it, if you will, a little Coloquintida. When your Gum-Water is thus prepared, pass it easily through



TO THE
Lady WALPOLE.

MADAM,



S your *LADYSHIP* is distinguished for your excellent Performances in Painting, Japaning, and many other curious Arts, I beg leave to lay before you a few experienced Receipts, which have never yet appeared in the World. Many of them I have been at great Pains and Expence to procure; and for the rest I am obliged to some Manuscripts of the great Mr. *BOYLE.*

The *DEDICATION*.

BOYLE. 'Tis by the Influence of his Name that I venture to address this little Treatise to your Ladyship, which, I perswade myself, will not be unacceptable to you, as I am sure the Experiments therein contained will fully answer their several Intentions.

I am,

Madam,

Your Ladyship's

Most Obedient,

Humble Servant.

THE



T H E
P R E F A C E.



THE following Piece is designed for the Instruction and Entertainment of Gentlemen and Ladies, who chuse to divert themselves in the curious Arts of Drawing, Japaning, Painting upon Glass, Varnishing upon Metal, Wood or Past-board, and of taking Views and Prospects justly, according to the Rules of Perspective.

The Author has taken Care to prescribe short and easy Directions for the speedy attaining the Knowledge

ii The PREFACE.

ledge of these useful and amusing Arts, without giving the Students the Trouble of consulting large Volumes (which are generally taken from one another right or wrong) or of learning several Branches of the Mathematicks, as is generally thought necessary, in order to understand Perspective; a Science, without the Knowledge of which, it is impossible to make any great Improvement in the Arts of Drawing or Painting, or even to be a Judge of good Drawing, or to understand whether one is Right or Wrong, in what one would invent or design.

I must confess, I owe my Knowledge of several valuable Receipts, to some Manuscripts of the great Mr. Boyle, which have never been printed, and have fallen into my Hands by Means of the same noble Lord, his Relation, whom I before mentioned in my Art of Draw-

The P R E F A C E. iii

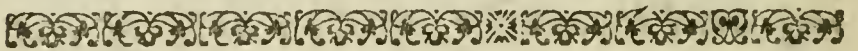
Drawing, and Painting in Water-colours.

I am likewise obliged to a worthy Gentleman, who, after a deliberate Study of Perspective, set me to rights in a few Hours, when I was at any Loss. As for the rest, they are Observations from the Experiments which I have made from time to time, at a large Expence, and with great Industry.

I have been upbraided by some Workmen in Curiosities, for publishing Receipts of Value, to instruct the Gentry in the Manner of Drawing and Painting, and in Arts of the like kind; for, say they, it is a Damage to the Workmen who get their Livelihood by such Things. I have a short Answer to this Argument; namely, that there are none of the Receipts, which I publish, but what are either my own Invention, or I have bought at a good Price, or else have been presented with by People of Fashion,
with

iv The PREFACE.

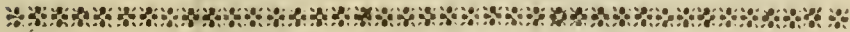
with their Desire to have them made publick ; and these are such as would never come to the Knowledge of the Workmen, if I was not to communicate them in this Manner, by which they have an Opportunity of improving themselves, as many of them have done, from Things that I have already published in the same way ; so that I can say, from my own certain Knowledge, that many of them are obliged to me, and, instead of complaining, ought to thank me.



N. B. If any Person should find a Difficulty in the Performance of any Article, I shall be ready to put them to rights for a reasonable Satisfaction.

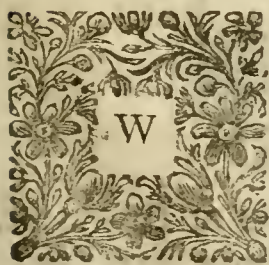


THE
METHOD
OF
LEARNING to DRAW
IN
PERSPECTIVE, &c.



CHAP. I.

*Short Rules for Drawing in Perspective,
which will prove of great Use to all De-
signers.*

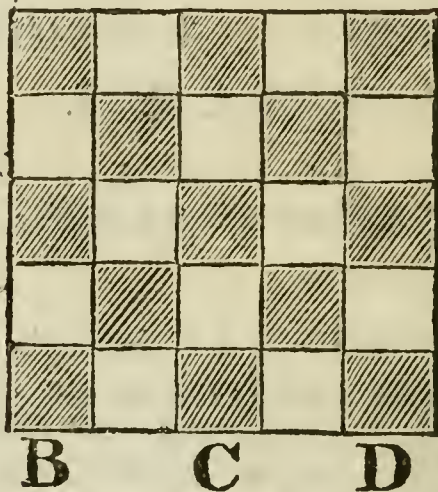


WHEN I observe the Faults daily committed in the Designing of Landscapes, or Drawing Views and Prospects, I more and more find the Necessity of knowing a little Perspective, to correct and avoid such Errors; for, understanding that Art will render any one capable of Drawing any Thing with mathematical Truth and Certainty.

But I conceive that the Reason, why so many Mistakes are commonly made in Drawings, proceeds from the Apprehensions that some have of the Length of Time it will take up, to render themselves Masters of Perspective, and from being frightned at the Difficulties they conceive are in that Study; particularly imagining, that one must be first well grounded in the Mathematicks: This I know has discouraged many from engaging in the Rules relating to this Art; but for their Sakes I undertake, in this Tract, to instruct them in the following Lessons how to lay any Plan in Perspective, and raise Pillars or Buildings to due Heights according to their proper Distances.

LESSON I.
Of the PLAN.

FIG. I.



Suppose we have a square Piece of Pavement, as in Figure I, consisting of twenty five Pieces of Marble, each a Foot square, it must be measured exactly, and laid regularly down upon Paper: You may likewise, for your better Observation

[II]

vation, mark every other Stone or Marble black, which will better inform you how every particular Square will appear, when we have a true perspective View of them; or else you may number every one, and, when the following Lesson is done, number those in the perspective Plan, with the same Figures as are marked on the first Plan.

LESSON II.

Of laying Figure I. in Perspective.

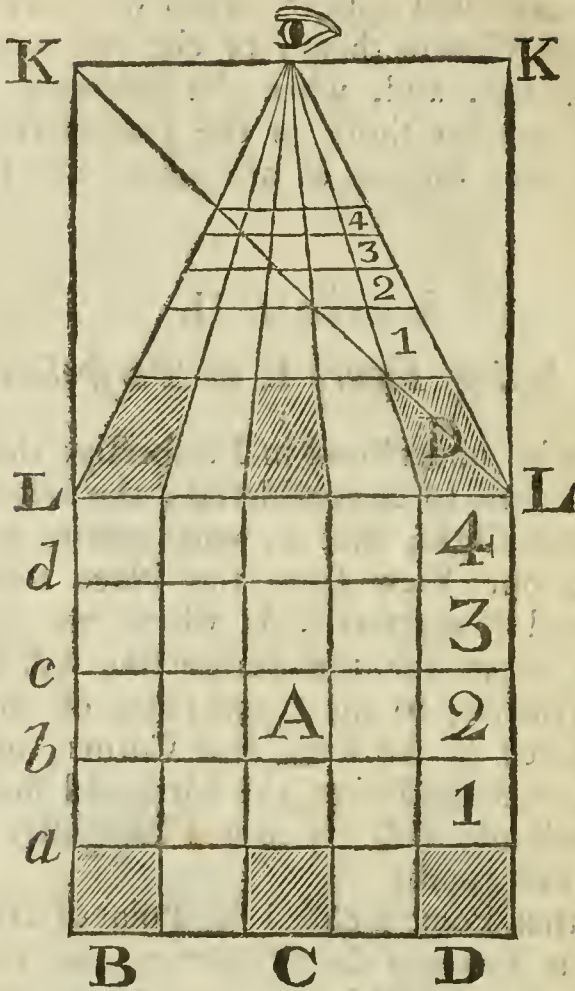
It is to be understood in Perspective that there are two Points to be considered; the first we call the Point of Sight, that is, what relates to every Thing in our View from the Place where we stand; and it matters little where we stand to take our View, for the Perspective will still be true, according to the Appearance of the Plan to our Eye: If we stand at a Corner, or in the Middle, or at any Point, the Method I shall prescribe presently will lay our Plan justly before us as it will appear.

The other Point is called the Point of Distance, because it governs the Distances, and the Proportions of every Thing we can truly see of the Plan, in whatever Position we happen to be.

FIG. II.

Point of Distance.

Point of Sight.



At A, you see the Plan of Fig. I. This is divided into Squares, as mentioned in that Figure; the three at the Bottom, marked B, C, D, in both, and the Squares in the Plan A, marked 1, 2, 3, 4, are those which are marked in perspective with the same Numbers.

Now, to lay your Plan in perspective, fix your Point of Sight as you observe in the Figure, or more or less to the right or left as you think proper; then draw the Line K, K, parallel to, and at what Distance you will *from*, the Line L, L;

L, L; then raise a Line on each Side from L to K, to form the Figure you see, as a Frame to your Picture; then draw a Line from the Corner K, which is the Point of Distance, to L, and this Line will regulate your Work.

Then draw Lines, from the Squares of your Plan to the Point of Sight, as exactly as possible; and wherever your Line of Distance cuts those Lines, which are drawn from the Squares of your Plan to the Point of Sight, that marks where your Squares in perspective ought to be; then draw Lines parallel to the Line L, L, where the Line of Distance cuts, and that will give you the true Figure of every Square: So D, in the perspective Plan, answers to D, in the measured Plan; and 1, 2, 3, 4, answers to the others in the same.

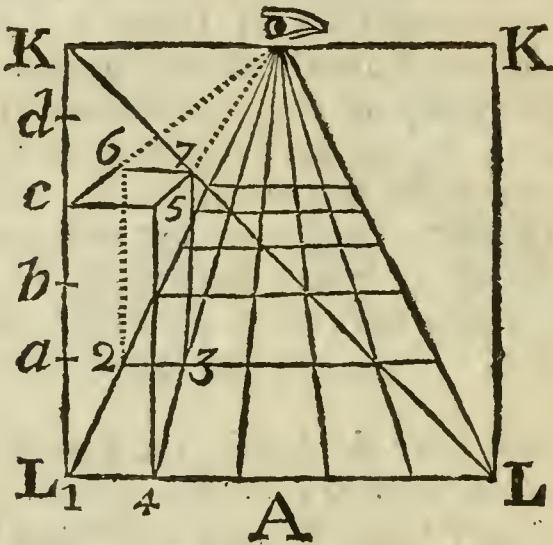
When you have done this, the next Rule you are to know is, how to raise either Pillars, Trees, Houses, or any other Bodies, according to their respective Heights, at different Distances and Proportion, on the Plan you have laid down.

LESSON

LESSON III.

How to raise Pillars, or any Bodies of a certain Proportion, in Perspective.

FIG. III.



You have now your Plan measured out, in perspective, into Squares of a Foot; one of these Squares in this Lesson serves for the Base, or Bottom, of a pillar a Foot thick. This Figure III. is exactly of the same Dimensions of the Plan laid in perspective at Figure II. First mark the Line L, K in equal Proportions, by the same Scale of the Ground-plan, Figure II; as, *a*, *b*, *c*, *d*, which are so many Feet in height; and they, standing on the Base of the first Figure, are Uprights, not in perspective: Then draw a Line parallel with L, 1, from Number 4, which gives you the Front of the Body you are to raise, and if it is to be only three Feet high, draw a Line cross from C to the Line raised from No. 4; and that determines the Height, which you will then find to be a Foot wide, and three Feet high by Measure:

Measure : Then from the Top of the Line 4 draw a Line, with a Black-lead Pencil, to the Point of Sight, and raise another Line from 3 parallel to the Line 4, till it touches the pencil'd Line, passing from 5 to the Point of Sight; which gives you the Side-appearance of the Column, or Body, as you will see it from the Place where you stand. [The Line from Point 3 should be drawn with a Pen, because it is to remain.] Then with a Pencil draw a Line from C to the Point of Sight, which will determine the other Line, to make the Shape of the Top of the Column ; and then raise a Line parallel with L, 1, with a Pencil, from the Point 2, till it touches the Line from C to the Point of Sight ; draw then a parallel Line to C, 5, at 6, 7, and you will have the Square of the Top of the Pillar, or Column, as you can observe it from the Place where you stand, which I suppose to be at A. [You must remember, that the Line drawn from 2 to 6 is only an imaginary Line, to be rubbed out ; for it cannot be seen from the Place where you stand, and therefore must not appear in the Drawing ; but you should not leave it out, because it shews you where to regulate the Top of your Column, and teaches you how to place your Column upon its Base with Certainty.] By this means you may see the Front and one Side of your Column : And the Line from 1 to 2 must also be rubbed out, because it can't be seen.

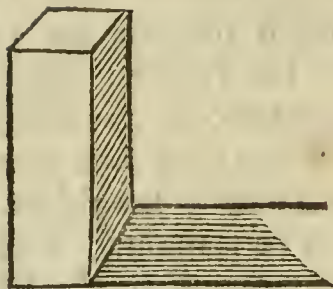
Then finish your Column only with the Lines

from 1 to C,		from C, to 5,
from 4 to 5,		from 6, to 7, and
from 3 to 7,		from 1 to 4 ;

and it will be drawn without any Imperfection, and appear as follows in Figure IV.

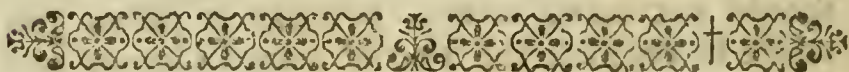
FIG.

FIG. IV.



When this is done, you may place another Column on any one of the Squares erected in the same Manner, observing to sling your Shades all on one Side, and then you cannot err : But especially mind where the dotted Lines are in Figure III.

When you can master these few Lessons, which you may gain with very little Pains, you will be capable of doing any Thing in this Way, that will be regular and certain, and know the Faults of the Ignorant and Unskilful.



C H A P. II.

Of Painting upon GLASS.

PAINTING upon Glass is an Art which has generally appeared so difficult, that few have succeeded in the Attempt; and yet there is no Representation of any Portrait can appear more elegant, than in a Picture done well in this Manner : For you have all the Softness and all the Tenderneſs that can be deſired in a Picture,
and

and it is easy too for any Person to work upon ; for there are no Out-lines to draw, nor any Shades to make, but you put on the Colours without the Trouble of either.

The Pictures, which we use on this Occasion, are those done in Mezzo-tinto, or what we call Mezzo-tincto Prints, for their Shades are rubbed down with an Instrument on the Copper-plates ; so that the several Lines, which are forced to be drawn to represent the shady Part of any common Print, are by this Means scumbled together, and appear as soft and united as in any Piece done with Indian Ink.

When you are provided with such Prints as you like, cut off the Paper of the Margin, so that none be left but the Print itself ; then take some of the finest Crown-glass, and have it cut exactly to the Size of your Prints, and, when you have cleaned your Glass very well, lay on one Side of it some fine Venice Turpentine, as thin as possible, with a Brush made of Hog's-hair ; and, if you perceive the Turpentine to lie unequally, pass a Piece of Wood, made like a flat Ruler, over it till it lies equal in every Part ; then wet the Back of your Print with a Sponge and Water, and lay the pictur'd Side upon the turpentin'd Side of the Glass, taking Care that every Part of it lies close to the Glass, and that there are no Bubbles or Blisters to be seen ; then you may roll it over with a Wooden Roll, made like a Cylinder of two Inches diameter, to fix it close to the Glass ; and when that is done, wet the Back of the Print again with a Sponge and Water, till the Paper will rub off with your Fingers ; then rub it gently till there remains only the Picture itself upon the Glass ; so will you have all the Lines and Shades very visible, as if it was a fine drawing in Indian Ink : Then let it remain till the

next Day to dry, for else the Colours would not take, because they are ground in Oil.

S E C T. I. *Colours for Painting on Glass with the Necessaries for such a Work.*

At most Colour-shops of note in *London*, we may meet with Colours of several sorts ground in Oil, and tied up in little Bladders to be sold at Three-pence, a Groat, or Six-pence a Piece, according as they are more or less valuable : Of these provide as follow.

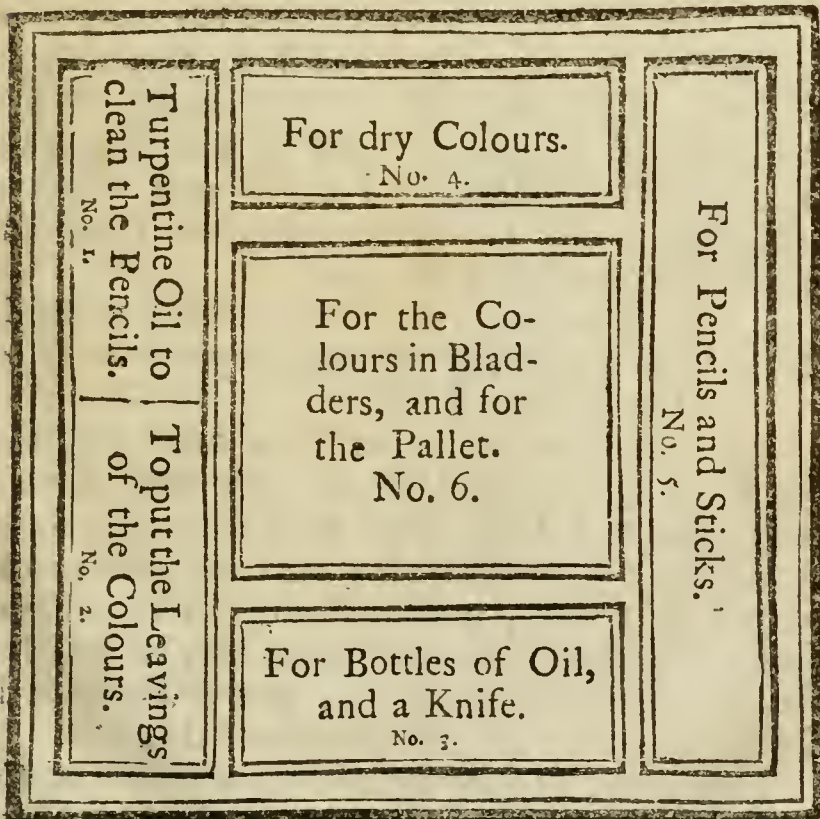
<i>Whites.</i>	Verditer,
Flake White,	Prussian Blue,
White-Lead.	Sanders Blue,
	Indigo.
<i>Yellows.</i>	<i>Blacks.</i>
English Pink,	Lamp Black,
Yellow Oaker,	Ivory Black.
Dutch Pink,	
Yellow Orpiment.	<i>Greens.</i>
<i>Reds.</i>	Verdigrease distill'd,
Rose Pink,	Verdigrease and Yellow
Vermillion,	Oaker mixt,
Red-Lead,	Verdigrease and English
Indian Red,	Pink mixt,
Lake,	Verdigrease and Dutch
Carmine.	Pink mixt.
<i>Blues.</i>	<i>Browns.</i>
Ultramarine,	Spanish Brown,
Blue Bise,	Umber.

When you are provided with these Colours, you may mix them one with another to what Degree of Colour you think proper upon a *Pal-let*,

Let, with a smooth Knife with a tender bending Blade, adding a little more of one Colour to another, mixing them well till you have what you want.

To get the Colour out of the Bladders, prick a Hole at the Bottom of each Bladder you design to use, and press the Bladder till you have Colour enough upon your *Pallet* for your present Use; for in a Day's Time the Colours will dry, and can never be recovered.

Provide on this Occasion a Box about two Foot and a half long, about five Inches high and sixteen Inches wide, with Partitions in it as follow.



The Use of this Box, which is to keep all your painting Things together, and preserve them clean, I shall here very particularly explain.

At Number 1 must be a Box of tinn'd
No. 1. Iron to be placed in the wooden Box, because it must hold Oil of Turpentine to clean your Pencils when you have done work.

When you paint you must take care to use only one Pencil in a Colour, or, in other Words, to have a Pencil for each Colour; and as soon as you have done using them for the Day, clean them from the Colours, by dipping them into the Oil of Turpentine, and laying the hairy part

of the Pencil on the tinn'd Division, between Number 1 and Number 2, press your Finger hard on the Hair, and draw it four or five times over the Tin, then will the Colours, which came out of the Pencils, fall into the Tin-box, Number 2, and by that Means the Pencils will be clean, and the several Mixtures of Colours, that fall there with their Oils, will become a good Size for Gold.

Then lay your Pencils with their Sticks
No. 5. in the Box No. 5, and they will be fit for Use another Time.

Note, the Pencils should be of two Sorts, that is, some of Camel's-hair to paint with, such as will come to a Point when the Colour is in them, and some dry Brushes of white Hair, never to be dipp'd in Colour, but used only to scumble or join one Colour in another when they are just laid on, so that they appear soft, and you cannot distinguish where any one leaves off abruptly.

You ought at least to have three Dozen of Camel's Hair-pencils of all Sizes, and a Dozen and half of rough Brushes, with Sticks to each about ten Inches or a Foot long; the Sticks may be bought ready made at the Colour-shops; they are

are commonly made of Cedar or Brazil-wood, but some nice Persons have them turn'd in Ivory.

No. 4. At numb. 4, you should have a Case divided of Wood in several Parts to keep your dry Colours in, such as Carmine and Ultramarine, with others that you may keep by you to grind when you want them, for sometimes you may have Occasion in the Country to grind a Colour that you want.

The Reason of having Divisions made in this Box is to keep these Colours from mixing with each other, and thereby spoiling one another; for if there were no separate Apartments, sometimes in a hasty taking out or putting in of these Colours you may disturb the Papers they are commonly wrapped in so much, that some of the Colours will be spilled. The fine or rich Colours, such as Ultramarine or Carmine, may rather be bought in Powder than ground in Oil; for the first is worth near four Pounds an Ounce, and the Carmine, if 'tis good, worth about twenty Shillings; therefore it is better to have these in Powder, than to have them ground in Oil at the Colour-shops; for by Degrees they will dry, though in the Bladders, and you will have so much Loss from them.

The Method to grind these in Oil, is to put a little of either of them upon a polished Marble, and with a Drop or two of Oil mix them well with a soft bladed Knife, and lay it on your *Palette*; but of the Ultramarine and Carmine a very little will serve, for the least Touch on the light Sides of your Drawing will give a Lustre to your Picture; and if it be Ultramarine it will be lasting, whereas I have a great deal of Reason to suspect, that the Prussian Blue will not, if it is exposed to the Weather, as I have observed in some Sign-paintings of two Years standing, and there

there I find that Colour to change into a dirty Yellow : But if we mix the Prussian Blue with Varnish, it will hold and last like Ultramarine ; in short, the Air must be kept from it to preserve it.

If we want to grind any other Colours coarser than these in their Powder, we must have a Muller, which must be made of one of the hardest Stones we can get, and finely polished ; Porphyry would be the best, made in the Shape of a Sugar-loaf, if one could get it : But for the Shape, the Sugar-loaf Figure is the easiest for any one to turn with their Hand, and every Painter knows the Way. Marble is good, or any Stone that will polish ; nay, even Glass, or Crystal, or any such like Thing ; but, if you have a great Quantity of Colour to grind, you must consider, that you must have a large Quantity of Oil ; but never so much as to overcome the Quantity of Colour. In the Grinding-part you may observe, that the Colour will frequently turn from under the Muller, then with a thin Knife scrape it up, and place it under the Muller again, till 'tis as fine as you desire it : Then immediately put it into a Piece of Bladder, first having the Bladder immersed in warm Water, to soften it ; tie it up, and let it remain to be used as I have directed the others.

Number 3 may in its Use be explain'd
 No. 3. thus. Let that Partition be lined with Tin, or Iron tinn'd, because this is to enclose the Bladders of Oils, which you should always keep by you, as Oil of Linseed and Turpentine, Nut-oyl, and burnt Oil ; and in the taking of these in and out, the Apartment would be greasy, and stain the Wood, whereas the Tin will preserve it from any Stain from the Oils.

Number 6 is in the middle of the Box,
 No. 6. and should be made of tinn'd Iron likewise,

wise, to take out and put in at pleasure, for 'tis to contain all the Bladders of oiled Colours; and, as some of them will be frequently used, the Reservoir for them must in Time become greasy; and over them is to be laid the Pallet, which, every Night after you have done your Work, should be cleaned of the Colours you have put upon it; or else covered with its Colours in Water, to keep them useful till the next Day. To keep your Pallet clean, rub it with a coarse Linnen-cloth with Oil of Turpentine, and then rub it till 'tis dry (as one may call it) with Nut or Linseed-oil.

But take what care you will of your Oil-colours in small Quantities, when they are exposed to the Air, there will be a Coat of thick hard Scale over them in a Day or two, which indeed one may take off with a Knife; but we lose much of the Colour, and some of them are very costly. When you take off the scaly Part, the rest of the Colour is fit to use; and, if it is too thick, then put a Drop or two of Linseed-oil to it, and mix it well with your tender Knife. Some People when they use Ultramarine and Carmine, because of their great Price, only put a Drop of Oil on their *Pallet*, and put as much Colour to it as they think will be enough, only working them together with a Knife; which indeed is more saving, than to mix it on the Stone.

S E C T. II. *How to use the Colours in Painting on Glass.*

As the Lines and Shades of your Picture happen to open, so you ought to dispose your Colours, that is, lay on the lighter Colours first on the light Places of your Prints, and the darker over the shaded Places; and, if you have once
laid

laid on the brighter Colours, 'tis no great Matter whether the darker Sorts are laid a little over them: For the first Colour laid on will hide those you lay on afterwards; as for Example:

Y E L L O W S.

The lightest Yellow may be laid on first, and the Dutch Pink will shade it.

R E D S.

The Red-lead may be laid on first, as the brightest red Colour, and to shade it with Lake or Carmine, will bring your Picture to a beautiful Scarlet, equal to any Tincture of the finest Dye of Cochineal.

B L U E S.

Lay on first the blue Bise, and shade it with Indigo; or else take Ultramarine, and lay it on in the Lights, and shade it with Indigo.

G R E E N S.

Lay on first some Verdigrease, and then the Mixture I have mentioned of that and the Dutch Pink: But you may make this Green as yellow as you please, by adding more Dutch Pink, as you see Occasion.

It is to be noted, that, when any of these Colours are too strong, they may be lightened to any Degree, by mixing White with them upon your Pallet; or you may darken them, by mixing them with the deeper Colours: But they must be well mixt with the Knife, before you use them.

When you have painted your Glass, it must stand three or four Days, before it will be dry enough to put in a Frame.

C H A P. III.

Of the Making of Crayons for dry Colouring.

THE Use of Crayons for dry Colours is so necessary in taking of Views and Prospects, and there are so few Crayons that are good of the Sort, that I think the Way of making them a necessary Article to be known to every one, who is a Lover of Drawing and Painting.

W H I T E.

As for *White*, we have no occasion of any other than white soft Chalk, which should be saw'd into Lengths of an Inch and half or two Inches. [There are little Saws made on purpose for such Uses about four Inches long, and very thin.] When you have saw'd out your Crayons of Chalk, which should be at most a Quarter of an Inch thick, round off the Corners with a Penknife, and point them, by drawing your Penknife upwards from the Place where the Point is to be. [You ought to have a Dozen or two of these to lie in a little Case by themselves, or they will be discoloured by the other Colours.]

Y E L L O W Pastils, or Crayons.

Yellows come next, which should be divided into four or five Degrees of Colour.

First. Take some Grounds of Starch and Flower of Brimstone, mix them well with a Knife upon a polished Marble, so that they produce the Colour of Straw, or a Yellow as faintly will shew itself; then pour a little Milk to them, or

a little pale Ale-wort, till the Colour become like a Paste; then spread the Paste on a smooth Piece of Chalk, with a broad Knife, till it is about the third Part of an Inch thick, and let it lie till 'tis half dry; then with a sharp Knife cut it in Lengths of an Inch and half, about the fourth part of an Inch wide, and roll it thin between two little Pieces of Board, till they are round like a Straw, and point them as I have directed for the Chalk. If you please you may use ground Chalk, instead of Grounds of Starch.

2d Yellow. It is made of yellow Oker, ground well with fair Water, and then dried and beat. Mix this with ground Chalk, in such Quantity as it will be a little deeper than the former Colour, and mix them up with pale Ale-wort, in which a little white Sugar-candy may be dissolved: And make these Crayons as the former.

3d Yellow. Grind yellow Oker with Water with a Stone and Muller, and when 'tis dry beat it very fine, and make it into Pastils, or Crayons, with pale Ale-wort, or Size made with Glovers Leather, boiled in Water till it comes to a Jelly; use it as before directed, and roll the Pastils between two Boards.

4th Yellow. Take English Pink, grind it as the former with Water, and when 'tis dry beat it fine, and mix it with a very little ground Chalk, till 'tis deeper than the former Colour; then put to it some Wort of pale Ale, and stir all well together, and make it into Pastils, or Crayons, by rolling in the foregoing Manner.

5th Yellow. English Pink is to be alone ground as the former, and to be made in Pastils, or Crayons, by itself with pale Ale-wort.

6th Yellow. Dutch Pink is to be used as the former, and mixt with pale Ale-wort, or Milk, and to be rolled and dried.

7th Yellow. Orpiment is one of the most poisonous Colours that can be used; however, it is one of the most beautiful Sort, and is next to Orange-colour. This must have a little ground Chalk mixt with it, well tempered together, and made up with pale Ale-wort, with a little Gum-dragon dissolved in it: And roll up them into Pastils, as you did the former.

O R A N G E-Colours.

1st Orange-Colour. Take yellow Orpiment, mix it with pale Ale-wort, and when it is in Paste, roll it, and make it into Pastils, or Crayons.

2d Orange-Colour. Take Orpiment and Red-lead: (but the Red-lead must be very finely ground in Water, and dried) then mix a little of this with your Orpiment, till you have the Colour you desire; and putting to it some Ale-wort, wherein some Gum-dragon has been dissolved, make it into a Paste, and roll it into Pastils, or Crayons.

3d Orange-Colour. Take English Pink, grind it well, and put to it as much Vermillion as will make it of the Colour you desire; mix these up with Ale-wort, that has been boiled till 'tis more glutinous than ordinary, and make it into Pastils, as before directed.

4th Orange-Colour. Take English Pink finely ground, and put to it as much Red-lead, well ground, as will make it agreeable to your Design, mix these well with Ale-wort boiled to a Thickness, and make them into Crayons.

5th Orange-Colour. Take some Dutch Pink, grind it well, and mix with it some Red-lead finely powdered, to the Colour you want; then make this into a Paste with Ale-wort, or Milk, and roll it up into Crayons as before directed.

Note, In the Mixture of these Colours, observe that they have as many different Shades as possible.

R E D S.

1st Red. Take Red-lead, grind it well with Water, then dry it and beat it to fine Powder, and put to it some Chalk or White-lead finely ground, to brighten it; mix this with Ale-wort, wherein a little Gum-dragon has been boiled, make it into a PASTE, and roll it into Crayons. In this you should make some of your Pastils deeper, others paler.

2d Red. Take Red-lead, and, when 'tis well ground with a Marble and Muller, make it into a PASTE with Ale-wort, wherein Gum-dragon has been boiled.

3d Red. Red Oker wants no Preparation, but sawing, as I have directed for Chalk, in the first Article.

4th Red. Take Vermillion, grind it fine, and mix with it some fine Chalk in Powder, or White-lead well pulverized; divide your Composition into three Parts, and, by adding more of the White to one than another, make three different Colours; then put to each Ale-wort boiled thick, and make them severally into PASTE, and so into Crayons.

5th Red. Take Vermillion well ground, and mix it with Ale-wort, that has been boiled to a Thickness with Gum-dragon, till it is a PASTE, then roll it into Pastils.

6th Red. Take some good Lake, grind it well with Water upon a Marble, and, when it is well dried and powdered, lay it in three Divisions, and mix with each as much ground Chalk, or White-lead, as will make them of several Colours; then
make

make them severally into PASTE, and then into Crayons.

7th Red. Take fine Lake, and reduce it to as fine Powder as you can with Water, and, when it is dry, and again finely powdered, mix it with Ale-wort, and make it into Pastils, or Crayons.

8th Red. Take Indian Red, grind it well with Water, and dry it like the other Colours; then mix it with Ale-wort that has been boiled to a Thickness with a little Gum-dragon: This alone will be a very strong Colour, but you should mix some of it with White, in two or three different Manners, to be Shades to one another.

9th Red. Take Rose-pink, and cut it into the Shape of Crayons, without any Preparation. Carmine is too dear for them, for twelve Pennyworth would make but a small Crayon.

PURPLES.

1st Purple. Take Rose-pink finely ground and powdered, mix it well with a little Sanders Blue, till the Powder appears of the Colour you want, then make it into a PASTE with Ale-wort thickned with Gum-dragon, and roll them into the Figure of Crayons.

2d Purple. Take Lake finely ground and washed, put to it as much blue Bise as you think proper to make it of a reddish Purple, and you should vary this in two or three Manners, each lighter than the other: In the lighter Sorts put a sufficient Quantity of Chalk, or White-lead well ground, and mix them up with Ale-wort boiled to a Thickness with Gum-dragon, and roll them into Pastils.

3d Purple. Take some Lake well ground, and add to it as much Prussian-blue as may make it of the Colour you desire; mix these very well together in several Parcels, making some more inclining

clining to red then the others, and to the faintest Purple of them add some ground Chalk at your pleasure, and make these severally into Paste with Ale-wort thickned by boiling; so make them, after the same Manner as the former, into Pastils.

B L U E S.

1st Blue. Blue Bise is the lightest blue Colour we use, and must be well ground with common Water on a fine Marble; then let it dry, and reduce it again to Powder; then lay it in four Parcels, and put to three of them, in different Proportions, some ground Chalk, or White-lead; so that, when they come to be mixt, every one may be lighter then the other; mix these separately with Ale-wort that is thickned with Scraps of Glovers Leather, and, when they are in a Paste to your Mind, make them into Crayons: And the fourth Part of the blue Bise must be made up by itself, in the same Manner.

2d Blue. Take Verditer well ground on a fine Marble, lay it in four Parcels, and mix one of them purely with a thin Size, made of white Glovers Shreds and Ale-wort, and the other three Parts mix with several Proportions of ground Chalk, or White-lead well ground, so as to make Shades to one another; make these into Paste with Ale-wort thickned with Gum-dragon, and so into Crayons.

3d Blue. Take some Prussian Blue, and grind it well; then lay it in four Parcels on your Marble, and mix with three of them some ground Chalk, or White-lead well ground, to make them of different Degrees of Colour; and the fourth Part must be alone. Make the three mixed Colours into Paste with pale Ale-wort boiled till it thickens; and the plain Colour must be made into a Paste with some Ale-wort boiled and thickned

thickned with white Shavings of Leather from the Glovers. Make all these into Crayons.

4th Blue. Take Rock-Indigo, and grind it well with Water on a Marble, dry it and powder it again, and then divide it in Parcels, as is directed above, and with two or three Parts of them mix different Proportions of ground Chalk, or White-lead ground, to make them paler or deeper; and one Part must be the simple Colour. Put to the mixt Colours some Ale-wort thickned with boiling, and mix them to Pastes, then roll them into Crayons.

As for the plain Indigo, mix it with Ale-wort thickned with Glovers Shreds of white Leather, by boiling, and make it into Pastils.

B L A C K S.

1st Black. The Black which is commonly used as a Crayon, is Charcole cut into Lengths; the softest and best is that which is made of Willow. Have at least a Dozen or two of these; for black and White are used a great deal more than any other Colour.

2d Black. Take Ivory Black ground very fine with common Water, and put to it a very little ground Indigo; for a blueish Cast will enliven your Black, and help it from that Deadness, which a plain Black always carries with it.

B R O W N S.

1st Brown. Take for a light Brown, some Fullers-earth, grind it well with Water, and mix with it some ground Chalk, or White-lead, to make it in different Colours, that is, to make it lighter as you think fit; mix this up with pale Ale-wort boiled thick, and at least have four Sorts of it.

2d Brown. Take some Spanish Brown, grind it very well, and mix with it some Fullers Earth, to make it lighter, for the Spanish Brown is a dark Colour of itself; and, when you have made this Mixture, you may put to some Part of it a little white Chalk ground, or White-lead, in different Proportions, to have them of various Shades: These are for the lighter Browns; and mix them severally in Pastes with a light Size of Fish-glue, or Isinglass, and Water, and some of them with pale Ale-wort boiled thin, or thick Water-gruel boiled with Gum-dragon; then make them into Pastils.

3d Brown. Take Spanish Brown well ground, and some Indian Red, mix them well together, and put to them some pale Ale-wort, till they become a Paste; you may make some of them lighter, if you will, with ground Chalk, or White-lead; and then roll them into Crayons.

G R E E N S.

1st Green. Take some Verdigrease, and boil it in sharp Vinegar, and add to it, when it boils, a little Tartar powdered, which will dissolve the Verdigrease so, that the Liquor will be of a fine Colour. Then set the Liquor in little Gallipots exposed to the Air, which will dry the Colour, and then it will dissolve in common Water. This may be taken with just as much warm Ale-wort as will cover it, and will dissolve the Green; then make it into Pastils with white Chalk ground, as much as what you think proper.

2d Green. Grind distilled Verdigrease with Vinegar on a Marble, wash it well with Water; the Manner of which is, to throw the Verdigrease into Water, and in half a Minute to pour off the Water into a Cup, and let it settle; then pour the Water from it, and wash it again in the

the same Way ; when this is dry, make it into Crayons with Ale-wort.

3d Green. Take Verdigrease, prepared as before, finely powdered, and mix it with a little Prussian Blue in several Proportions : In the lightest Sorts put a little White, or the brightest Yellow, well ground, to make Varieties of Colour ; mix all these with pale Ale-wort boiled to a Thickness.

4th Green. Take some Indigo well ground, and some English Pink, mix them well together upon a Marble ; and, when they are well powdered, make them into a Paste, and roll them up with a soft Size and Oil, till they are of the Figure of Crayons ; or with pale Ale-wort, or thick Water-gruel ; but when we use Water-gruel, it must be strained, and boiled with some Gum-dragon.

5th Green. Take some blue Bise ground fine, and put to it some Dutch Pink well ground ; mix them in Parcels, and prepare them in Shades to one another ; then make them into Pastes, and roll them into Crayons. You may have five or six Varieties of these. *Note,* The Liquid which you are to use to make them into Pastils must be Ale-wort boiled a little thick.

6th Green. Grind Rock-indigo very fine with Water on a Marble, and, when 'tis dry, beat it fine again ; then lay it in Parcels on the Marble, and put to some of them a little flower of Brimstone, in greater or lesser Quantities, and to others Flower of Brimstone and Dutch-pink mixt, so that you may have Variety of Colours ; when these different Shades are as you intend them, then make them into Pastes with Ale-wort thickned by boiling with white Glovers Leather-shreds, or with a little Gum-dragon.

7th Green. Grind some Rock-indigo with Water, and add to it, in several Parcels, as much Dutch-pink as you see convenient, to make your Greens of various Shades ; when these are well mixt, put to them some Ale-wort thickened by boiling, and make them into Pastes, and, when they will roll, make them into Crayons.

Memorandum. The Reason why these Crayons are better than commonly those which are bought at the Shops is, because they are generally made too stiff with Gums, and so will hardly touch the Paper ; but all these will Work freely, and express the several Colours you desire.

We must consider, that the Reason why we make five or six Shades of each Colour is, because in this Case we cannot mix any when we use them ; whereas in Oil-painting, and painting in Water-colours, we may make what Mixtures we please in an instant : And when we set about any Painting or Drawing in Crayons, which happens to have a great Variety of Colour in it, we ought not to be without every Sort of Colour that can be thought on. *Note,* These Colours should be kept in a Box partitioned, every Sort by itself, *viz.*

The *White.*

Yellows. Lay the brightest Sorts in one, and the deeper Sorts in another, till you come towards the Orange-colours.

Orange-Colours. The lighter Sorts of Orange-colours in Apartment, and the deeper in another.

Reds. The paler Sorts, or Flesh-colours, in one Apartment, the brighter Reds in another, the stronger Reds in another, and the deepest Reds in another, every one with its proper Shades, till we come towards Purple.

Purples. The paler Sorts inclining to red in one Apartment, the next Sorts, more inclining to blue, in another, with their Shades ; and these which are

next

next to blue with their Shades, in a Part by themselves.

Blues should follow the Purples. Put the lightest Preparations in the first Apartment, the next Degree into another, a third into another, and the fourth, to the last, into others : But keep the Prussian-blue quite by itself, and its Mixtures by themselves; it serves very well in this Way to supply the place of Ultramarine; and, as it is much cheaper, I forbear to mention the Use of Ultramarine-blue in this Case, which is extravagant in the Price; for a Crayon of it could not be made under half a Guinea: And besides, in this Way of Crayon-drawing, the Preparation of Prussian-blue does very well answer the same End; though that Colour will not do in Water-colours, nor even last in Oil-colours, if it comes to be exposed to the Weather; for in either Case it changes to a dirty Yellow-colour; but I find that the Crayons hold, by being imbodyed as I have directed.

Greens should be divided into three or four Sorts, and, with their Shades, be laid in several Apartments.

Browns should be likewise put in three or four Parcels, with their proper Shades, to be laid in each Apartment of one great Box. And you should never be without Crayons of Charcole in another Case. With all these you will be compleatly furnished; and, when you go out to take any View, have one of every Sort in a little Box, divided as the foregoing, to carry in your Pocket.

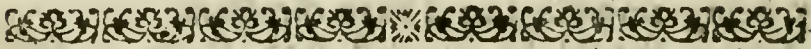
The Paper, which you should use on this Occasion, should be *Venice* rough Paper, almost like our whited brown Paper, or even the whited brown Paper which they sell at every Chandlers-shop; the stiffer it is the better; that which they call Cap-paper is the best, as I have found by Experience;

rience ; for upon such the Colours easily distribute themselves. And by this Means every one may take Figures in their proper Colours as they see them ; for they may match the Colours as they appear with the Crayons they have by them ; and, as the Crayons are dry, they will not alter their Colour, but the wetted Colours will appear deeper when they are wet, than when they are dry, which will deceive the Eye of a Beginner.

Instructions for the Use of Crayons.

Remember when you use these Crayons, that you point them from the bottom upwards, and make not the Points too sharp, unless in the white Chalk, the red Oker, and the Charcole.

One may make a pretty Drawing on blue Paper with only Chalk and Charcole ; the strong Lights and the dark Shades make a fine Contrast, and a pleasant Appearance in a Drawing.



C H A P. IV.

Concerning the Manner of Etching, or Hetching, to be done with Aqua-fortis on Copper-plates.

YOUR Copper-plates must be very smooth, and polished on one Side, as they are done for the Engravers.

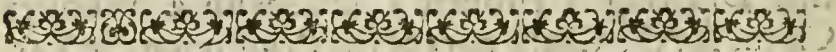
Then make a Varnish of Petroleum, Bees-wax and Turpentine melted together in a glazed Earthen-vessel ; when it is cold, put it into a piece of Mantua Silk, and tye it up, then warm the backside of the Plate over some hot Small-cole

cole Dust, and pass the Silk with the Mixture in it over the fore-side of the Plate, till 'tis all covered ; after this, hold the varnished part of the Plate over the Smoke of a Candle, moving it backwards and forwards till 'tis all equally blacked.

You must next take your Drawing, or Print, and rub the back of it with Chalk, or red Oker ; (but Chalk is the best) and when the back of this Drawing is rubbed a little with a Woollen Cloth, lay the Chalk part of the Print upon the Varnish, and, fixing it well, draw over all the Strokes with a blunt pointed Needle, marking it as you go along, the Shades ; so you will have all the Lines marked upon your Varnish.

Then provide four or five Needles of different Sizes, and with the finest make the finer Lines, and so by degrees on to the Larger, tracing them over the Varnish upon the Lines of the Drawing, till they touch the Copper-plate ; and, to prevent your rubbing out any of the Chalk-lines, you must have an even Piece of Wood supported by two Bits to move before you, and to rest your Hand upon ; when this is done, make your Shades ; and when they are done, border round the Plate some green Wax, which, being put in warm Water, will become soft ; and then pour on *Aqua-fortis* with a third part of Water ; and, when you think the *Aqua-fortis* has eaten deep enough in the light part, pour off your Water, and wash the Plate with common Water ; dry it, and, with a Pencil of Camel's Hair, paint over the lightest parts with common Varnish ; then pour in again your *Aquafortis*, and let it eat into the Copper a little more, and, when you think that's enough, use the Plate as you did before, and so on to the last : Then take off your green Wax and Varnish, by warming the Plate as you did at first ; and clean the
Plate

Plate with a coarse piece of Linnen, without any thing in it that may scratch the Plate; when this is done, you may have your Plate touched up with a Graver, or you may send it to the Rolling-press for a Proof, and then the Engraver can see best what Sharpness or Amendments ought to be made.



C H A P. V.

Of Japanning, and Indian Varnishes.

S E C T. I. *Of Japanning Metals.*

IN japanning of Metals we must take notice, that Steel or Iron may be japanned or varnished with any Colour. I have only seen it done by a young Gentleman of *Montpelier*, who performed it extremely well, and from him I had the Receipt.

The part of the Metal which we design to japan in Colours should not be polished; but the parts of the Metal, which ought to be polished, should be done first, or else, if we polish them after the painting, some of the Colour may be disturbed or taken off. The first Proof I saw of this Work was a Pair of Scizzars, where, from the Blades to the Rings, there were the Figures of Storks holding the Rings in their Mouths, which Rings were of Silver. I do not know that I ever saw any thing so genteel; and the Gentleman beforementioned was kind enough to give me the following Method of doing it.

Take any Colour you have mind to, and grind it well with Water with a Stone and Muller; then

then let it dry, and ground it in a Mortar, and sift it if there is Occasion ; then, instead of Oil, mix it with white Varnish, and paint with it what you think proper.

The *Whites* are Ceruse, or Flesh-white.

Yellows are Yellow-oker, English-pink, and Dutch-pink.

Reds are Vermillion, Red-lead, and Lake.

Blues are blue Bise and Indigo.

Blacks are Lamp-black, and Ivory or Bone-black.

Greens are Verdigrease ground, or Verditer and Dutch-pink ground together.

Browns are Fullers-earth and Spanish-brown.

And *Purples* may be made between red and blue, till you see them mixed to your Mind.

S E C T. II. *Of Japanning Iron Snuff-boxes, which now are generally covered with a black Varnish, that they may look like China, and gilt about the Edges.*

Take your Iron-plates or Snuff-boxes and lay on the following Preparation on the Top and Bottom, *viz.* White-lead ground with Water, and dried, then beaten again to fine Powder, and mixed with Size ; this lay equally on the Top and Bottom of your Snuff-box, and let it dry well. Then about the Rims, or Edges of the Box, lay on some Yellow-oker with Size, and over that some Gold-size ; when the first is well dried, lay on the Gold-size I have mentioned in the Colour-box, you may buy it at the Colour-shops ; when you lay this on, let it be near dry before you lay on your Leaf-gold, that it may stick the better.

You must have a Cushion of Woollen Cloth to cut your Leaf-gold upon, that the pieces of Gold may be exactly to your Size, or the Shape you desire.

Then

Then take your Leaf-gold on some Cotton, and lay it on the part which is done with Gold-ize, and dab it on till it lies smooth, and let all dry.

When this is done, paint what Figures you please on the upper and under Side of your Box; upon the White-ground principally with blue Bise, mixed with white Varnish, and shaded with Indigo. The best Figures, to represent China, may be taken from Tea-cups, or from Saucers, or other pieces of China-ware, which will look best if they be blue and white; but one might paint Coats of Arms in all their Colours, or any other Device; and, when these are dry, wash the white part with white Varnish, and the golden part with the golden Varnish.

S E C T. III. *White Varnish, or Amber-Varnish, from a Manuscript of Mr. Boyle's.*

Take white Rezin about two Drachms, melt it in a clean glazed Pipkin; then put into it an Ounce of the whitest Amber you can get (beat finely to Powder) by little and little, stirring it with a small stick over a gentle Fire till it dissolves, pouring in now and then a little Oil of Turpentine, when you find it growing stiff; so continue till all your Amber is melted; but you must take care you do not set your House on fire, for the very Vapours of the Oil of Turpentine will take fire by Heat only; but, if it happens to do so any where, put immediately a flat Board, or wet Blanket over the firey Pot, and by keeping the Air from it you will put it out, or suffocate it: Therefore, when I make this Varnish, I use the Caution to melt my Rezin in a Glass of a Cylindrical Figure in a Bed of hot Sand, after the Glass has been well *annealed* or warmed by degrees in the Sand, under which you must keep a gentle
Fire,

Fire. When you have made your Varnish, pour it into a coarse Linnen-bag, and press it between two hot Boards of Oak or Iron, and use it with any of your Colours, as well as to varnish them over when they are painted : But to cover Gold, you must take the following Varnish.

You must note, that when you have varnished your Snuff-boxes with this white Varnish, you may put them in a declining Oven, which will harden the Varnish.

S E C T. IV. Hard Varnish, that will bear the Muffle, (from a Manuscript of Mr. Boyle's) to lay over Gold, or Brass, or any other Metal that appears like Gold, to keep it from changing black, as the Bath-Metal and such others will do, when they are exposed to the Air.

Take of Colophony, which you may buy at the Druggists, half an Ounce, melt it in a glazed Vessel ; then strew in by degrees an Ounce of the Powder of Amber, stirring it all the while ; and when it begins to harden, or resist the Stick, put in a little Oil of Turpentine, which will immediately soften it ; then take an Ounce of Gum-copall powdered, and sprinkle that in as you did the Amber, every now and then pouring in some Oil of Turpentine, and strain the Varnish as I have directed in the foregoing. This is proper to lay upon your Gold, and the Things done with it must be put in a declining Oven three or four Days successively, and then it will resist even Fire.

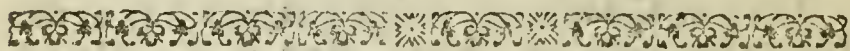
S E C T. V. To japan Brass, such as is used to gild Brass-buttons, or make them look like Gold.

We may use this upon Gold-leaf, or upon that which is called the *German Leaf-gold*, or upon
F
Brass,

Brass, or upon the *Bath-Metal*, which are designed to imitate Gold.

Take a Quart of Spirit of Wine, and put it in a Retort-glass, then add half an Ounce of *Gamboge*, an Ounce of *Lake*, and an Ounce of Gum-mastick; set this in a Sand-heat for six Days, or near the Fire, or put the Body of the Retort frequently in warm Water, shaking it twice or thrice a Day, then put it over a Pan of warm Smalcole Dust; when your Metal is well cleaned, paint it over thinly with this Varnish, and it will appear like the Colours of Gold: You may dry this in a declining Oven, and it will not rub off.

N. B. This is a good Varnish to mix with any Colours, that incline to Red; and the white Varnish to mix with those Colours that are pale, or of any other Sort.



C H A P. VI.

Of Japanning upon Wood or Paper; with Receipts for making several Sorts of Japan-Wares, either Gold, Silver, or in Colours.

IN *Japan* the People have a Method of making Bowls, Plates, and other Vessels of brown Paper, and sometimes of fine Saw-dust: These Vessels are very light and very strong, when they come to be varnished, and are in great Esteem among us. The Method of making such Utensils I shall here disclose.

Take Slips of brown Paper, boil them in common Water, mashing it with a Stick while it boils, till 'tis almost become a Paste; then take
it

t from the Water, and beat it well in a Mortar, till 'tis so reduced as the Rags are in a Paper-mill; then make a strong Gum-water with Gum-arabick and common Water, a Quantity sufficient to cover your Paper-paste an Inch; put these together into a glazed Pipkin, and let them boil, stirring them very well, till you think the Paper-paste is impregnated with the Gum; then have ready your Mould to give your Paste the Figure you design for it. The Mould is made as follows:

For Example, suppose you design to make any Thing of the Figure of a Plate, have a hard Piece of Wood turned on one Side of such a Figure, and make a Hole or two in the middle quite through the Wood; [You must observe this Mould must be like the back of a Plate.] when this is done turn another hard Piece of Wood of the same Figure, about the eighth part of an Inch less than the former; but about the Rim or Edge you may have some little Ornament carved or ingraved in the Wood. When these Moulds are made, oil them very well on the turned Sides, and continue to do so till they are well soaked with Oil, then they will be fit for Use; when you go to make your Plate of the Paper-paste, take the Mould with the Hole in it, and oil it afresh, set it even upon a strong Table, and spread over it some of your Paste as equally as possible, so as to be in every Part about a quarter of an Inch thick; then oil the other Mould very well, and set it exactly as may be on your Paste, and press it hard down; then put a great Weight upon it, and let it remain Twenty four Hours. [The Hole at the bottom is for the Water to pass through, that is pressed out of the Paste; and the oiling of the Moulds is to prevent the gummed Paste from sticking

to the Wood.] When you perceive the Paste dry, it will be as hard as a Board, and be fit to lay a Ground upon, made with strong Size and Lamp-black, letting it dry gently; and when that is dried thoroughly, then take some Ivory-black finely ground, and mix it with the following Varnish.

S E C T. I. *To make the strong Japan-Varnish.*

Take half an Ounce of Colophony, melt it in a glazed Pipkin; then sprinkle into it by degrees an Ounce and half of Amber finely beaten and sifted, stirring it well, now and then adding some Spirit of Turpentine; when this is melted, then sprinkle in an Ounce and half of Sarcacole finely beaten, stirring it all the while, and putting frequently more Spirit of Turpentine, till all is melted; then pour it through a coarse Hair-bag, placed between two hot Boards, and press it gently, till the clear is received into a glazed warm Vessel; with this Varnish mix your ground Ivory-black, and, warming first your *Paper-plate*, paint it on before a Fire in a warm Room, as equally as you can, and set it in a gentle Oven; then the next Day put it in a hotter Oven, and the third Day into one very hot, and let it stand till the Oven is quite cold, and then it will be fit for any Use, either with Liquors that are cold or hot, and will never change, and 'tis with great Difficulty you can break them. I am of Opinion that if the Moulds were cast in any hard Metal, they would do as well as if they were turned in Wood.

S E C T. II. *Of making these China-Toys of the Colour of Gold.*

Prepare your Bowls, Plates, or any other Vessel, in the same Manner as the former, or you may

may take fine Saw-dust, if you can have it, and dry it well ; then pour on it some Turpentine, melted with an equal Quantity of Resin, and half as much Bees-wax, mix them well, and put to them your dry Saw-dust, stirring all together till the Mixture becomes thick as a Paste ; then take it off the Fire, and warm your Moulds, and spread some of your Mixture on that with the Hole in the middle, as equally as possible, and press down the Mould upon it ; then set it to cool, and your Vessel will be fit for painting. You may put into this when your Turpentine is melted some Sarcacole finely powdered, to the Quantity of half the Turpentine, stirring it well, and it will harden it : And you ought to make this Composition in the open Air, for it will endanger your House.

But which ever of the Mixtures you use, if you have a mind to have them appear like Gold, paint them over with Size, and when that begins to stick a little to the Figure, lay on Leaf-gold, either *pure*, or that Sort which is brought to us from *Germany* ; but the last is apt to change green, as most of the Preparations of Brasses will do ; such as those which are called *Bath-Metal*, and others of the like Sort, which appear like Gold when they are fresh polished, or cleaned every Day : But as the Air coming upon them will make them alter to an ugly Colour, so I chuse Gold, which is durable, and will never change, and a much finer Colour than any of the former for a Continuance. But though the Leaf-gold, we are to use, is tender and may be subject to rub off ; yet the Varnish, we shall put over it, will keep it bright and entire. When the Gold is laid on, and the flying Pieces brushed off, which must be done when the Gold-size is dry, then apply

ply the following Varnish to brighten the Gold, and preserve it from rubbing.

S E C T. III. *Varnish for Gold, or such Leaf of Metals as imitate Gold.*

Take some Colophony, melt it, and then put in two Ounces of Amber well pulverized, with some Spirit of Turpentine, as the Amber thickens, stirring it well; then put an Ounce of Gum-elemi well powdered, and some more Spirit of Turpentine, still keeping the Liquor stirring, till 'tis all well mixed: However, use as little Spirit of Turpentine as you can, because the thicker you make your Varnish for Use, the harder it will be. Do this over a Sand-heat in an open Glass, and strain it, as you are directed for the former Varnish.

Use this Varnish alone, first warming your Vessels made of the Paper-paste, and lay it on with a Painting-brush before the Fire; then harden it by degrees, at three several times, in Ovens; the first a slow Heat, the next a warmer Oven, and the third a very hot one, and your Vessels will look like polished Gold.

Note, As for those Vessels, made with Sawdust and the Gums, you may use a Varnish for them made of the same Ingredients as above, excepting the Gum-elemi; and this will dry in the Sun, or in a very gentle Warmth.

S E C T. IV. *To make your Vessels of a red Colour with gilt Figures on them.*

Prepare your Vessels as before with *brown Paper-paste*, and when they are dry, and prepared as directed in the first, mix some Vermillion,
or

or Red-lead, with the Varnish first directed in this Chapter, and use it warm; then stove it or harden it by degrees in an Oven, and it will be extreamly bright; or else lay on your first Ground with Size and Vermillion, and in proper Places stick on, with Gum-arabick and Water, some Figures cut out of Prints, as little Sprigs of Flowers, or such like; and when they are dry, paint them over with Gold-size, and let that remain till 'tis a little sticking to the Touch; then lay on your Gold, and let that be well closed to the Gold-size, and dried; then, if you would shade any part of your Flower, take some Ox-gall, and, with a fine Camels Hair-pencil, trace over the shady Parts on the Leaf-gold, and upon that paint with deep Dutch-pink; and, when that is dry, use your Varnish in a warm Place, (I mean that Varnish directed for the Covering of Gold) and set it to harden by degrees in an Oven; which Varnish will secure the Leaf-gold (as they call it) brought from *Germany*, from changing, by keeping the Air from it.

S E C T. V. *A Method to silver these Japan-Vessels.*

When you have made your Vessels, and they are well dried, paint them over with Size and ground Chalk, or Whiting; let them dry well, and then paint them over again with the brightest Gold-size you can get; (for there is much Difference in the Colour of it, some is almost white, and another is more yellow; the first is proper for Silver, and the other for Gold) when this Size is almost dry, lay on your Leaf-silver, and close it well to the Size, brushing off the loose Parts, when 'tis dry,
with

with some Cotton. [*Note*, When you lay on your Silver or Leaf-Gold, keep it free from the Air; for the least Motion of the Air will rumple your Leaves, and they will not lye smooth.] Then use the following Varnish to cover the Silver.

S E C T. VI. *To make the Varnish to cover the Silver.*

Take some fine Turpentine, and melt it; then take of white Amber well pulverized about an Ounce an a half, put it by degrees into your glazed Pipkin to the Turpentine, and stir it well, adding sometimes some Spirit of Turpentine, till the Amber is all dissolved; then put to it half an Ounce of Sarcacole beaten, and half an Ounce of Gum-elemi well levigated, pouring in at times more of the Turpentine-spirit, till all is dissolved; let your Fire be gentle, and stir the Mixture continually while 'tis on the Fire.

This Varnish will be white and strong as the former, and should be used warm, and is as strong as that which we lay upon Gold; it must be hardened by degrees in an Oven, as the gold Varnish, and your Vessel will look like polished Silver.

S E C T. VII. *Varnish in Japanning on Wood, to mix with several Colours.*

You must, if you design to use Varnish to mix with Colours, take Spirit of Turpentine, and dissolve in it a little Gum-Taccamahacca over the Fire, till it is a little thickened; use this with any Colour that has been well ground with Water, and pulverized afterwards. When your Work is done, you may, if you will, varnish over your Piece with the same Varnish directed to colour Silver; and

and one might also cover Tables of Wood, as well as Tea-boards and Plates, or Bowls of Wood, in the same Manner, as is mentioned for the Pastes of Paper and Saw-duft.

SECT. VIII. *Directions for imitating China, or Purflane-ware, upon Tea-tables, Tea-boards, &c. upon Gold or Silver Grounds.*

Prepare your Tea-tables, or any other useful Thing, as I have mentioned in the foregoing Receipts, and then mark out your Designs upon them; make Ovals or Rounds upon them in a good Disposition, so as to be uniform, or well adapted to the purpose, that they answer one another in a regular Manner; then paste on some Paper in proper Places, and, when your paper is dry, draw your Designs upon them, and paint them with Water-colours; then with a Brush lay Gold-size or Silver-size on the other part, and, when that is near dry, lay on your Leaf-gold or Silver, and, when all is well dried, varnish over with the white Varnish, if it be a Silver-ground; or, if it is a Gold-ground, varnish with the strongest Varnish, excepting only the Ovals or Circles of Painting, for those must be done with the white Varnish, which is so transparent, that all the Painting will appear through it. If you lay on a Gold-ground, or any Colour darker then that, then let your Paintings be blue and white; or, if it is Silver or Light-ground, then use the most fiery Colours in your Paintings.

SECT. IX. *The Method of Glazing Prints with white Varnish, so as to bear Water, and the Polish.*

It is best in this Way, first to paste your Print on a Board, or a Piece of Shock-cloth strained on a Frame ; to do this well, prepare some stiff Starch, and with a Sponge, dipt in Water or thin Starch, wet the back of your Print, and, if you design to lay it on a Board, dip a large Brush in the thick Starch, and brush it over the Board as even as possible, and let it dry ; then a second Time repeat the same Work, and so continue till the Veins or Grain of the Wood is quite filled : In the last Operation, when the Starch is just laid on, lay upon it your wet Print as equally as possible, so that there appear no Bubbles in it, press it close every where till it lyes smooth, and so let it dry. In this Operation your Hands must be very clean, or else you will soil the Print ; in about twenty four Hours it will be dry enough to varnish with the following, *viz.*

White Varnish for Prints.

Take of *Ithyocolla*, or *Isinglass*, or *Fish-glace*, as some call it, four Ounces, and pull it into small Pieces, boil this in a Quart of Brandy, or strong Spirits, in a glazed Pipkin ; and when, by taking out a little, you find it will make a strong Glue, by being a little exposed to the Air, it will do for your Purpose ; but be sure to make it as strong as you can ; and, while it is hot, with a large Brush, wash over the Print as quick as possible, and as smooth as may be ; let this stand a Day, and then brush it over again with the same Varnish, or Glue, and let it dry very well ;

well ; then brush it over with white Varnish, at such a Distance from the Fire that it may not be too hot, or else it will blister, and do this two or three times over ; then set it by for a Day or two, and brush it over with white Varnish again three or four times, and let it stand a Day or two ; then varnish it a third Time with two or three Passages of the Brush, and in three or four Days polish it with a soft Linnen-cloth and some fine Tripoli, rubbing it very gently, till it remains as smooth as possible, and clear it with Flour and oil ; it will then appear as bright as Chrystal ; and, if it should at any time be annoyed by Flies, you may wash it with a Sponge and Water, which will clean it.

The white Varnish.

Take Gum-sandarack of the clearest and whitest Sort one Pound, Gum-mastick of the clearest Sort one Ounce, Gum Sarcacolla the whitest one Ounce and half, Venice-Turpentine three Ounces, Benzoin the clearest half an Ounce, white Rezin half an Ounce, Gum-animæ an Ounce and half ; these must be dissolved and mixt in the following Manner :

Put your Sarcacolla, and Rezin into a little more Spirits than will cover them to dissolve ; then put your Gum-animæ, Benzoin, and *Venice* Turpentine into a Glass, or glazed Vessel, and pour on as much Spirit as will cover them an Inch, then provide a glazed Vessel, or Glass, for your Gum-mastick and Sandarack, and pour on them strong Spirits, enough to cover them about an Inch, to dissolve them rightly ; then, in a distinct Vessel, of the same Sort as before, put your Gumelemi, and cover it with Spirits to dissolve. [In this

Process, you need only pulverize the Gums Animæ, Sarcacolla and Benzoin, and you may break the Resin a little.] While these are dissolving, for three or four Days, shake the Bottles twice or thrice each Day, then put all these together in a glazed Vessel, stirring them well, and strain the Liquor and Gums gently, beginning with the Gums, through a Linnen-cloth ; [This will prevent any Dirt getting into your Varnish] then put it into a Bottle, and let it stand a Week before you use it, and pour off as much of the clear only, as you think you shall want for present Use.

To paste Prints upon Cloth for Varnishing.

If you put your Print upon Shock-cloth well strained in a Frame, brush over your Cloth with strong Paste, made with Flour and Water, and immediately brush over the back of your Print with well prepared Starch ; and then as readily brush the Cloth over again with the same Starch, and lay on your Print as equally as possible, without letting any Bubbles or Blisters appear in the Paper ; but you must observe, that, when you lay on your Paper upon the Cloth, as both the Cloth and the Paper are then wet, however close you lay the Paper to the Cloth, they will both together appear flagging, and unstrained, yet, as soon as they are dry, all will be smooth, as either was at the first : Let them remain so in a dry warm Place for a Day or two, and then varnish your Print, as before directed, with Glue made of Ichthyocolla, and then with the white Varnish.

With this Varnish you may mix up any Colour, that has been ground dry, upon a Marble, and paint with it upon any Figure you have Drawn,
or

or upon any Print you have pasted upon your Work ; but the varnished Colours should be chiefly put upon the shady parts. To know what Colours are proper Shades to one another, see the Chapter for making of Crayons.

Varnish made with Seed-Lacca.

Put a Quart of strong Spirit into a large Glass-
vessel, and put to it six ~~Pounds~~ ^{Ounces} of Seed-lacca ;
let these stand together two Days, shaking them
often ; then take a Jelly-bag, or a Flannel-bag
made like what is called *Hippocrates's Sleeve*, and
pass it through, letting the Liquor drop into a
Receiver, and squeezing the Gums every now
and then ; when the Varnish is almost out of the
Bag, add more, and press it gently, till all is
strained, and the Dregs remain dry ; [Take care
you do not put this Dross into the Fire, for fear
you set your House in a Flame.] then put it in
Bottles, and keep them close stopt, setting it by
till you perceive all the thick Parts settled to the
Bottom, which will be in three or four Days, then
pour off the clear into a fresh Bottle, and 'twill
be fit for Use.

As for the Varnish made of Shell-lacca, 'tis not
of any great Service, though often recommend-
ed, for it will not bear the Polish.

When you lay on your Varnishes, take the fol-
lowing Method : If you varnish Wood, let your
Wood be very smooth, close grained, free from
Grease, and rubbed with Rushes.

2^{dly}, Lay on your Colours as smooth as possi-
ble, and, if the Varnish has any Blisters in it, take
them off by a Polish with Rushes.

3^{dly},

3dly, When you varnish, keep your Work warm but not too hot.

4thly, In Laying on of your Varnish, begin in the Middle, and stroke the Brush to the Outside, then to another extreme Part, and so on till all is covered; for the Brush if you was to begin at the Edges would leave Blots there, and make the Work unequal.

5thly, In fine Works, use the finest Tripoli to polish; do not polish your Work at one Time, but, after the first polishing, let it dry two or three Days, and polish again for the last Time.

6thly, In the first Polishing you must use a good deal of Tripoli, but in the next a very little will serve; wash off your Tripoli with a Sponge and Water; dry your Varnish with a dry Linnen-rag, and clear your Work with Oil, Whiting, and Lamp-black.

S E C T. X. *To take off the Figure from any Piece of China-Ware, though the Person has not been acquainted with Drawing.*

When you have any Figures to your liking upon any China-dish, Cup, Plate, or such like, you must lay a Piece of oiled Paper over them, so as to hold the Piece steady, till you can trace out the Lines of the Figures; then lay the oiled Paper on a Paper blacked on one side, and the blacked Paper on a clean Paper; then trace the Lines with a Pen, or blunted Point of a Needle, till the Lines are all impressed on the white Paper, and draw them over with a black Lead-pencil, and mark the Shades, where they separate from the light Parts of the Colour, that so you may lay on your Colours as you see them painted on the China-ware; then cut out your Figures close to the Out-lines, and fix them upon
your

your Ground of Whiting and Size, or Size with ground Chalk, with thick Gum-arabick and Water, and, when they are quite dry, paint them, the lighter Parts in Water-colours, and the shady Parts with Varnish mixed with the darker Colours; when these are dry, wash all over with the white Varnish before a Fire, but not so hot as to make the Varnish rise in Blisters; when the Varnish is dry, lacker it again with the same Varnish, and repeat it a third Time; then scrape some Tripoli very fine, and with a soft Rag, dipt in Water, take up a little of the Tripoli at a time, and polish it, by gentle rubbing, till 'tis smooth, then wash off the Tripoli with a soft Sponge and Water, and then, with a dry fine Cloth, wipe off the Tripoli, and, when that is dry, clean it with Whiting and Oil, if it is a white Varnish; or, with Oil and Lamp-black, where the Varnish is black.

But the common Way is to cut out Prints, and paste them on such Parts as we think fit, and then colour them with Water-colours, and varnish them with white Varnish. 'Tis an easy Way of Painting, because the Shades of the Prints, when you lay on a transparent Water colour, will give the Light and Shade that Colour to your purpose, without using a dark and light Colour.

S E C T. XI. *Some remarkable Directions in Colouring of Draughts or Prints in Japanning, as Flowers, Birds, Fruits, &c.*

If you have Prints or Drawings in black and white of Flowers; if the Centre of the Flower is rising, just touch the Edges of the Lights with a thin Tincture of Gamboge, and lay on some Dutch-

Dutch-pink, or Gall-stone, over the Shades, so as to run into the Lights a very little. I say this because the Thrums in the Middle of Flowers are generally Yellow, but if of any other Colour, as by Observation I find they are sometimes Blue, sometimes more light, and sometimes darker, then touch on the Verges of the Lights a little Ultramarine-blue, and over the Shades either some Sanders-blue, to run a very little into the Ultramarine, or else shade with Indigo; and, some of the White of the Print being left void of Colour, will then give a Life and Spirit to the Colours so disposed.

All Flowers should be tenderly touched in the Lights, just to give a little Glare into the light Parts of the Colour you would give to the Flower-Leaves; and, if you have a natural Flower to paint by, you will presently see, that on the shady Side you must lay on the most shady Part, such a Colour as will force the rest to appear forward; but do not dawb over the Shades with too heavy a Colour, let it be such as may be transparent, if possible, and scumble it into the light Colour, which was laid on before; use your Pencil lightly on this Occasion, with a very little Gum-water in it, and use it before the Colours are quite dry.

In the Painting of the Leaves of Herbs or Plants, we ought to have regard to the Colours of the Greens; the brightest is the Verdigrease-green, described in *my former Book relating to Painting in Water-colours*; we should touch that Colour a little into the light Parts of the Leaf, from the Place where the lighter Parts of the Shades end; and then lay on some Sap-green on the shady Parts, so as to unite with the Verdigrease-green; and if the natural Leaf should be of a darkish Colour,

Colour, touch the lighter Sides of the Leaves with a little Verdigrease-green, and Dutch yellow Pink mixt together, or with a Tincture of French Berries, but so as to let the Verdigrease shine more than the Pink, and by Degrees shade it with Pink.

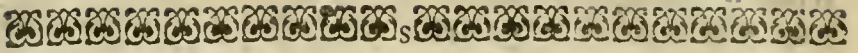
The Leaving the Lights, when we colour a Print, has two Advantages, *viz.*

If we leave the Lights on this Occasion, the Whiteness of the Paper serves instead of the Use of white Paint, which is an heavy Colour, and would rather confound the Edges of the Colours, which I have prescribed to be laid on, than do them any Service; but the Colours, which I have directed where there is no White laid on, will agreeably shine into the White of the Paper.

I am more particular in this, because several, if they see a Flower of a blue Colour, will lay it all over with one Colour, though it is thick enough to hide both the Lights and the Shades, and then it remains like a Penny Picture, where there is nothing to be seen but a Jargon of Reds, Blues, and Yellows.

With a little Practice of what I direct, you will soon see the good Effect of laying on Colours for this Use; though the Dawbing of Prints in the common Manner may please the Ignorant, when every one of Taste will soon discover the Impertinence.

In a Word, when you are about such Pieces of Work, *scumble* the Lights into the Shades of every Colour, and save the Middle of the Lights open on the Papers, for, as the Paper is white of itself, it makes a Light.



C H A P. VII.

To melt Amber, and cast it into any Figure with Flies, or any small Animals in it, as we see in the valuable Pieces of Amber sold at great Prices. From Mr. BOYLE.

TAKE Turpentine, and melt it in a Glass in a strong Sand-heat, where the Fire may be raised at Discretion, then have prepared three Ounces of Amber, either of the whitest or yellow Sort ; [If you want your Amber white, pick out the clearest white Pieces, or if yellow, the clearest of that Sort.] levigate either of them ; and when your Turpentine is melted, sprinkle the powdered Amber in, keeping it stirring with a Piece of Fir-wood, till you find no Resistance ; then, if you find your Melting to resist the Stick, drop in by Degrees a little Venice-turpentine, and keep it still stirring, till all your powdered Amber is dissolved, and is thick enough to pour into Moulds ; and, when 'tis cool, you will have a Figure, or the Medal you propose, filled with it, and remain as hard as Amber itself, with all the same Qualities that Amber commonly shews us.



T H E
I N D E X.

CHAP.	Pag:
I. Short Rules for <i>Drawing in Perspective</i> , which will prove of great Use to all Designers	9
LESS. I. Of the <i>Plan</i> . Fig. I.	10
II. Of laying Fig. I. in Perspe- ctive	11
Fig. II.	12
III. How to raise Pillars, or any Bodies of a certain Propor- tion, in Perspective. Fig. III.	14
Fig. IV.	16
II. Of Painting upon <i>Glass</i>	<i>ibid.</i>
SECT. I. Colours for Painting on Glass, with the Necessaries for such a Work	18
A Plan of a Box for Colours, &c.	19
II. How to use the <i>Colours</i> in Paint- ing on Glass	23
<i>Yellows, Reds, Blues, and Greens</i>	24
III. Of the Making of <i>Crayons</i> for dry Co- louring	25
<i>White</i>	<i>ibid.</i>
<i>Yellow Pastils, or Crayons</i>	<i>ibid.</i>
<i>Orange Colours</i>	27
<i>Reds</i>	28
<i>Purples</i>	29
<i>Blues</i>	30
<i>Blacks and Browns</i>	31
	<i>Greens</i>

The INDEX.

CHAP.	Pag.
<i>Greens</i>	32
Instructions for the Use of <i>Crayons</i>	36
IV. Concerning the Manner of <i>Etching</i> , or <i>Hetching</i> , to be done with <i>Aqua-fortis</i> on Copper-plates.	36
V. Of Japanning, and Indian Varnishes	38
SECT. I. Of Japanning Metals	<i>ibid.</i>
II. Of Japanning Iron Snuff-boxes, which now are generally covered with a black Varnish, that they may look like China, and gilt about the Edges	39
III. White Varnish, or Amber-varnish, from a Manuscript of Mr. <i>Boyle's</i>	40
IV. Hard Varnish, that will bear the Muffle, (from a Manuscript of Mr. <i>Boyle's</i>) to lay over Gold, or Brass, or any other Metal that appears like Gold, to keep it from changing black, as the Bath-metal and such others will do, when they are exposed to the Air	41
V. To japan <i>Brass</i> , such as is used to gild Brass-buttons, or make them look like Gold	41
VI. Of Japanning upon <i>Wood</i> or <i>Paper</i> ; with Receipts for making several Sorts of <i>Japan-Wares</i> , either Gold, Silver, or in Colours	42
SECT. I. To make the strong Japan-varnish	44
II. Of making these <i>China-Toys</i> of the Colour of Gold	<i>ibid.</i>
III. Varnish for <i>Gold</i> , or such Leaf of Metals as imitate Gold	46
IV.	

The I N D E X.

CHAP.

	Pag.
SECT. IV. To make your Vessels of a red Colour with gilt Figures on them	46.
V. A Method to <i>silver</i> these Japan-vessels	47
VI. To make the Varnish to cover the Silver	48
VII. Varnish in Japanning on <i>Wood</i> , to mix with several Colours <i>ibid.</i>	,
VIII. Directions for imitating <i>China</i> , or <i>Purflane-ware</i> , upon Teatables, Tea-boards, &c. upon Gold or Silver Grounds	49
IX. The Method of <i>Glazing Prints</i> with white Varnish, so as to bear Water, and the Polish	50
White Varnish for Prints	<i>ibid.</i>
The white Varnish	51
To paste Prints upon Cloth for Varnishing	52
Varnish made with Seed-lacca	53
X. To take off the <i>Figure</i> from any Piece of <i>China-ware</i> , though the Person has not been acquainted with Drawing	54
XI. Some remarkable Directions in Colouring of <i>Draughts</i> or <i>Prints</i> in Japanning, as Flowers, Birds, Fruits, &c.	55
VIII. To <i>melt Amber</i> , and cast it into any Figure with <i>Flies</i> , or any small Animals in it, as we see in the valuable Pieces of Amber sold at great Prices. From Mr. Boyle	58

F I N I S.

THE HISTORY OF THE

27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100

Lately published,

By the same Author,

The Second Edition, with large Additions, of

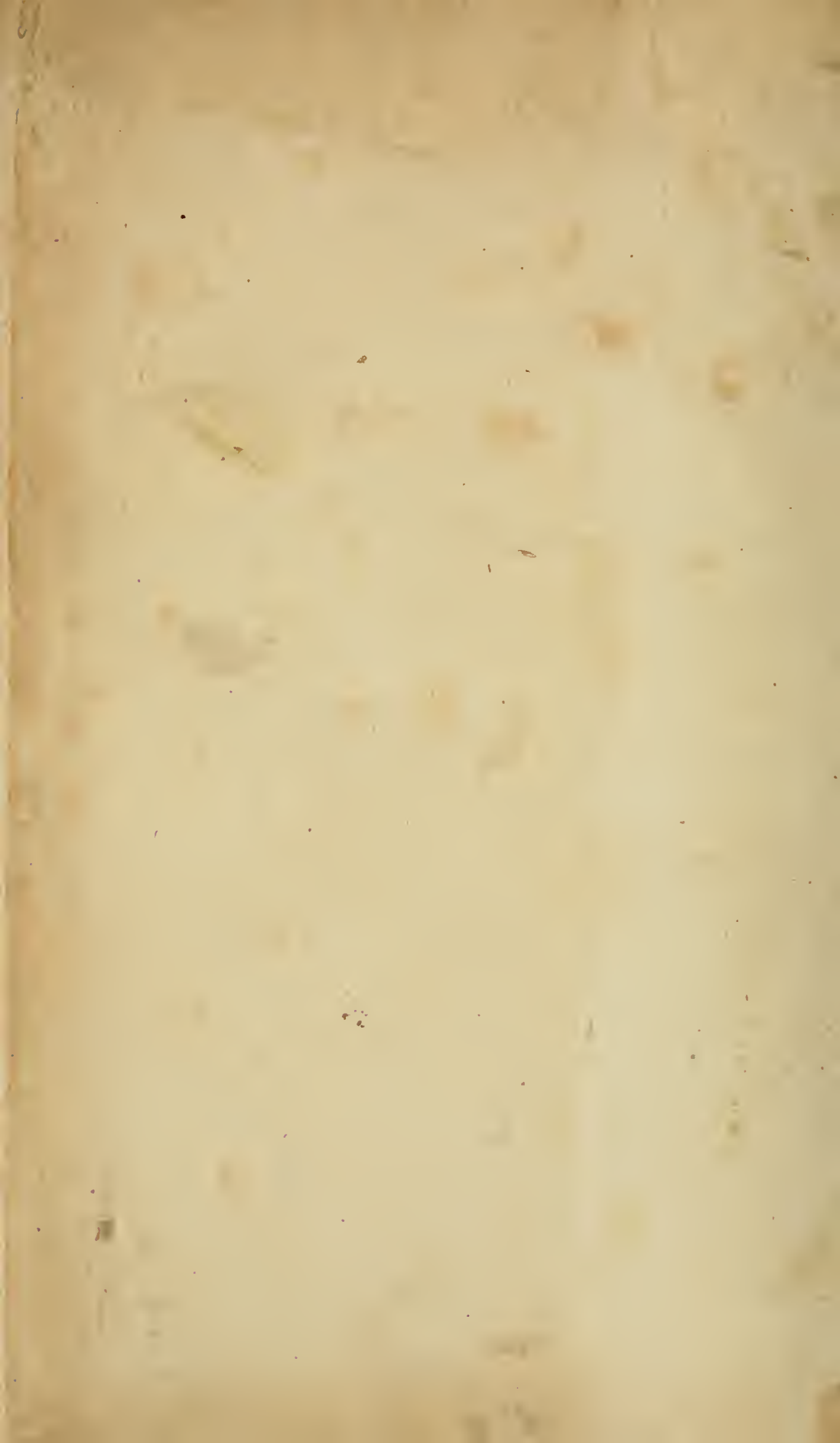
THE ART OF DRAWING, and PAINTING
in WATER-COLOURS. Where-
by a Stranger to those Arts may be imme-
diately rendered capable of Delineating any
View or Prospect with the utmost Exact-
ness; of Colouring any Print or Drawing in
the most beautiful Manner; and of taking off
Medals instantly, by various Ways, never
before made publick: Intermixed with sever-
al curious Receipts for the Use of *Painters,*
Statuaries, Founders, &c. With Instructions
for making transparent Colours of every Sort;
partly from some curious Personages in *Hol-
land, France* and *Italy*; but chiefly from a
Manuscript of the great Mr. *Boyle*; particu-
larly a Receipt of that Gentleman's, for ma-
king a Blue Colour equal to Ultramarine.

Printed for J. PEELE, at *Locke's-Head* in
Amen-Corner, Pater-Noster Row. [Price one
Shilling.]

Lately published
By the same Author

The Secret History of the late King of France

THE ART of DRAWING, and PAINTING
IN WATER-COLOURS, &c.
By a Gentleman to whose Art and Way of painting
greatly some of the Artists of this Kingdom
View or Prospect with the utmost exactness
ness; of Colouring any kind of Drawing in
the most beautiful manner; and of raising of
Medals instantly by various Ways, never
before made publick: Instructed with several
very curious Receipts for the Use of the Artists
Painting, &c. With Instructions
for raising the most beautiful Colours of every sort;
partly from the most curious Techniques in Ital-
land, France and Italy; but chiefly from a
Manuscript of the great Mr. Boyle; particu-
larly a Receipt of that Gentleman's for mak-
ing a Blue Colour equal to Ultramarine.
Printed for J. Park, at Apple-Head in
New-Court, Little-Nelson-Row. [Price one
Shilling.]



1952

Mr. Smith

METHOD of Painting in
WATER-COLOUR 31^c

1952

31^c

